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ABSTRACT

Examined in five papers are issues involved in developing elementary and secondary school programs for the gifted and talented. Emphasized by E. Dews is the need for educating the gifted and talented toward more humanizing values, and reviewed are examples of experimental curricula and learning environments. A national administrator's perspectives on such problems as grouping procedures and community abdication of responsibility to the gifted and talented are presented by B. McLaughlin. Cited by A. Baldwin are teaching strategies for gifted disadvantaged students. Considered in B. Boston's paper are methods of identifying gifted and talented pupils and organizing programs. The roles of change agents and facilitators are among the topics covered in an interview with J. Gallagher. Listed are 21 current publications on the gifted and talented, and provided is a bibliography of approximately 150 references on such topics as creativity, guidance and counseling, and teacher training. (CL)

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Gifted and Talented: Developing Elementary and Secondary School Programs

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Bruce O. Boston

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Introduction

THE production of a packet of materials on the education of the gifted and talented necessarily presents a bias. A viewpoint is presented both by what is included and by what is left out. In ordinary circumstances readers and users of the materials offered here would expect a range of resources that would introduce them to the major issues and concerns in the field: identification, ability grouping, programing, curriculum, teacher training, and the like. While we have tried to address ourselves to some of these issues, the major thrust of the new material presented here leads in a somewhat different direction.

Several of our authors point out with unusual clarity that these are not ordinary circumstances. In Roberta Flack's words, "These are tryin' times," and that fact places the education of the gifted and talented in a special context, one in which the question of the humanization of our common life is put with uncommon force.

Elizabeth Dréws directs our attention to the question of educating the gifted and talented toward more humanizing values, reminding us that we neglect the moral potential of each succeeding generation at the risk of great social loss. Bill McLaughlin brings into focus education's "urge to organize for predictability," community abdication of commitment to diversity, and the neglect of both precision and enjoyment of the educational experience. Alexinia Baldwin's exploration of strategies for the education of the disadvantaged gifted combines poignance with pragmatism, holding out the hope that there are concrete things to be done that are both doable and worth doing. The article presented by the editor discusses some basic organizational questions in the context of change processes and the

people who participate in them. Finally, we are pleased to present "A Conversation with Jim Gallagher" as part of this publication. Its separate introduction makes further comment here unnecessary.

Those who have been invited to contribute to this publication have some cogent questions to put to us. They have earned their battle stars (and scars!) on the firing line of gifted education. Many of the perspectives presented here are not commonly encountered amid the barrage of budgets at school board meetings or over cups of coffee in faculty lunchrooms. Biases are frankly expressed. While our contributors speak neither for the ERIC Clearinghouse on Handicapped and Gifted Children nor for the Council for Exceptional Children, nor on behalf of all educators of the gifted and talented, they certainly speak to all of us, and their voices deserve to be heard.

But a collection of materials such as this needs more than a fresh perspective to commend it to an audience. Thus, we have included a separate listing of publications and resources available through the National/State Leadership Training Institute on the Gifted and Talented and the ERIC Clearinghouse on Handicapped and Gifted Children. We hope these will be of long term use to readers. A topical bibliography has also been provided.

A closing word of appreciation is extended to Anna Jean Skinner of the Office of Gifted and Talented, US Office of Education, for much effort, in putting together some of the resources drawn upon to produce this publication when it was in an earlier stage of development.

Bruce O. Boston

The Gifted Student: A Researcher's View

Elizabeth Monroe Drews

THE gifted, in my view, can be simply defined as those who show themselves, in relation both to their age group and to all others, as more fully human. This means that they reach intellectual, aesthetic, and moral heights, and that they show insights and sensitivities in those areas which others do not. Ever since intelligence tests came into general usage, and particularly as a result of Terman's work, we have tended to use this narrow caliper as a means of selection, forgetting that artistic and ethical talents are every bit as important as intellectual talent, perhaps even more so. Fortunately, the present moral crisis was sensed by gifted students (as well as older philosopher generalists) in the Youth Revolution of the 1960's. Not only was the importance of art and nature, of truth and love reaffirmed, but searching questions were also asked about war and peace, prejudice and poverty. These questions are still being asked — and more seriously, if perhaps less shrilly.

At a time when the world could well be on the brink of disaster or, if we dramatically revise our lives, at the point of transformation, it is ridiculous to continue with single vision ways of selecting the gifted. To employ only one measure — and that of an essentially cognitive nature, the individual intelligence test (Stanford-Binet or Wechsler) — is inadequate. We must select for affective as well as individual growth. Although the individual test, including the nonverbal impressions obtained by the examiner, has many advantages over the group test, it is still a strictly limited instrument since it

explores only that narrow segment of cognitive learning which is conscious.

Exploring a Broad Array of Talents

I am suggesting that we can use at least three ways to explore a broad array of artistic and empathic talents and sensitivities: by inquiring into interests, by judging performance, and by administering tests.

The first of these methods, discovering the talented children by their show of interest, can be used by any concerned and alert observer. As an example of the second method, practicing artists in the school can not only serve as models of excellence and inspiration, but will also detect the unusually talented children who work with them. Thirdly, there are measures of character development recently devised that could well be used in this way. Attitudes and behavior in such realms as cheating, conformity, and helping others can be ascertained by tests as a supplement to observation. There is rather general agreement on value hierarchies and the various stages of character development by those who have studied this area intensively. There is consensus as to which values are better (or higher), and who is at what stage.

It has been said that we are what we think, what we read, what we watch on television, even what we eat. In the book that Leslie Linson and I wrote, *Values and Humanity*, we made the point that we are what we value. It is by our values that others know us and that we recognize and discover ourselves.

Recognizing Self Images

Helping the students recognize their self images and values was among the objectives of the programs which I was able to initiate in the Public Schools of Lansing, Michigan, where I had been Director of Psychological Services.

In the course of this research the students were asked to describe themselves. Three types emerged

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from their descriptions. Moving upward on the moral scale, they were (a) the *social leaders*, (b) the *studious*, and (c) the *creative intellectuals*.

The Social Leaders

Students, of course, are not pure types. In common with everyone else, they exhibit clusters of tendencies among which some are dominant or characteristic. When asked, they can tell you who and what they are, and this judgment about themselves has considerable validity. The avowed aim of the social leaders was to acquire money, power, and status. In this pursuit they were perfectly willing to be expedient and opportunistic. Valuing power, pleasure, and money, a majority of the boys did not "blame anyone for trying to grab all he can get in this world." By contrast, less than a third of the studious and creative intellectuals felt this way.

The social leaders did well enough academically, often helped by their charm, but their social interests came first. While the studious were preparing for examinations and the creative intellectuals were reading about existentialism, the social leaders were generally out electing someone to office or, better yet, getting themselves elected. Choosing to see people as connivers and managers, their effort was to be the masters in that game.

The Studious

At a middle level of development were the studious high achievers. These were conformists whose behavior was standard traditional and far from rebellious. They did their assignments and they did them well, although perhaps not always joyfully. Although they studied more hours per week than any other group, they tended to lack imagination and intellectual initiative. In fact, they seemed all too willing to fit into the conventional academic norm of following instructions, taking examinations, and solving the problems set forth by teacher and textbook.

Many of the studious high achievers wanted to know what to do and how, but rarely asked why. However, their feeling for logic was good, their sense of organization, superb. Learning for learning's sake might lead them astray. Above all they wanted to be "good boys" and "good girls" and follow the conventional wisdom. They were not often school leaders, but they did their work and they turned it in on time. Seldom creative and original, many were highly productive in terms of such things as the number of problems completed or the number of words in a theme. In their future lives, they wanted to be hard working and conscientious, to help others, and to live by the rules. They liked a schedule that was "set" and a life that was

"ordered." They tended to be deadly serious, and sometimes they took themselves that way.

The Creative Intellectuals

The most gifted intellectually and certainly the most imaginative of the three types were the creative intellectuals. These were nonconformists, but not in the amoral sense. Instead, they were highly moral individuals who followed their own consciences. They would not automatically conform to their teachers' standards or those set by other students. Like Thoreau they were born protesters who interrogated every custom. Trusting their own perceptions, they were unwilling to accept authority or authoritarian statements without critical examination. Frequently, they reported, they disagreed with classmates and teachers, preferring to listen to "people who hold ideas that are unpopular." In their attitudes to life, they were would-be movers and changers. Their approach was essentially intellectual, in the sense that it involved ideas and a willingness to use reason in rebuilding a world nearer to the heart's desire. In addition, their style was creative, in the sense that imagination was given full play. They were inventors, not copiers.

In this group of creative intellectuals were large numbers of our future scientists (but not the engineers and technicians), artists, writers, musicians, and philosophers-at-large. As adolescents, many of the creative intellectuals had interests in all these areas as well as being the ones who delved into ESP and similar topics on the outer fringes of knowledge. They also did in-depth studies of a scholarly nature. One student apologized for remaining a low achiever despite group counseling help, saying, "I've read all of Freud and all of Shakespeare this term and Maslow besides - and I've been so busy educating myself that I just didn't have time to do more than B work in school." Reflection normally preceded action. They did not always study the text or do their assignments, but they read a great deal at every opportunity - often reading while the teacher was teaching, not an endearing practice.

The creative intellectuals' behavior was open and seeking. They often reveled in "being" and aesthetic awareness, enjoying touch and taste, sight and sound. But this in no way denied their sense of becoming. Many translated their idealism into action, espousing principles and declaring dedications. The girls particularly were concerned with humane and altruistic causes.

If we agree with John R. Platt, the biophysicist, that the world is too dangerous for anything short of utopia - that we must radically improve our present life styles or risk destruction - then we must all work toward personal change and plan for the

emergence of a new human nature, a new person, a new image of humanity. What I am speaking of is reaching out for joy, not merely adjustment. The latter can mean tranquillized inertia, a willingness to accept things as they are even when the situation is dangerous and harmful.

Developing and Recognizing Human Capacities

The point of all this is that we have great potentialities that are only slightly developed. As Thoreau said, "But our capacities have never been measured, nor are we to judge what we can do by any precedents, so little has been tried." It was Emerson's view that the proportion of our ability that we use is only equal to the tip of the little finger. Paul Goodman mentioned that perhaps we make use of only 2% of our potentialities, while William James said, "Compared to what we might be we are only half awake."

How many of our young have capacities comparable to those of a Leo Tolstoy or a Marie Curie is not known, but their numbers, in my view, are far greater than is generally acknowledged. Unfortunately, few find ways to emerge, and only a few of those who do are recognized or encouraged. Until very recently a majority of gifted youth has rather resolutely kept their originality within acceptable bounds.

Along with this great reservoir of undeveloped human capacities, we must recognize that each person is unique and differs from every other one. Indeed, it would appear that those differences increase as people become more developed and more fully human. The most highly individual of all, i.e., those whose unique traits can be most clearly discerned and who are most differentiated from others, are the ones whom Abraham Maslow called the self actualizing. (These individuals are often highly gifted intellectually, but even more important, they have a high ethical concern for the good of others along with insight into and acceptance of themselves.) And the occasions when they reveal their unusual gifts and sensitivities are the moments that Maslow referred to as peak experiences. He believed they were "more purely different" from others at these times when they rose above the ordinary level and transcended themselves. Interestingly enough, these brief interludes which have been likened to mystic experiences are also moments when the individual feels a profound unity with others.

Whether our diversity will save us, as some claim, or whether it will destroy us, as others aver, depends on how we think about it and how the culture exploits it. All of us, and particularly the gifted, must recognize and develop the psychic bond which unites all humanity in a common kin-

ship. If there is to be a unification of the world, our gifted children must understand this unity of each with all, rather than acquiesce in continued conquest and exploitation of the poor by the rich and of the weak by the strong. A "pecking order" in the schools which contributes to an arrogance in the gifted and a humiliation of the slow will not lead to a better world.

Our competitive culture is pitilessly destructive in many ways and our schools reflect this. Yet we can look at things differently. Even in a society of conspicuous consumption, it is still true that the best things in life are free. As George Leonard pointed out, the Myth of Limited Good does not apply to such aspects of life as love and friendship, health, respect, security, even spiritual well being.

Generally in the past the gifted child has been selected and the adult creative geniuses lauded on the basis of intellectual or artistic superiority. The virtuoso did not have to be virtuous, nor the genius generous. But I feel the fate of the world and the needs of humanity dictate a reconsideration of all this. In my view, as I mentioned earlier, the gifted are those whose ethical qualities are comparable to their other talents.

A Desire to Deal with Moral Issues

Early in their lives most gifted children want to deal with moral issues and large human problems. Often they are appalled that the adults whom they know are not concerned about the things that bother them. We are morally irresponsible if we shrug off these concerns.

Before he had entered school, the prodigy Mike Grost had read extensively in mathematics and astronomy. By age 9, he tested in the top 10% in all the usual areas of knowledge when compared with graduating high school seniors. He was allowed to attend honors classes at the university in the morning, while he continued in elementary school in the afternoon. It was at this time that he began his efforts to understand the relationship between science and religion. When asked what books he would take with him to a desert island, he replied that he would choose only two books: Russell and Whitehead's *Principia Mathematica* and Thomas Aquinas' *Summa Theologia*.

It was Mike's opinion that St. Thomas had been working in a situation that put him under a great handicap. "The Dead Sea scrolls had not yet been discovered, and the translations of Aristotle were in many ways inaccurate." Mike also reported that St. Thomas was further hampered in his insights by the fact that the major theological innovations of his time were occurring in England, not in France where he lived. Thus, it was Mike's conclusion that

he personally could make a great contribution to knowledge by rewriting St. Thomas in terms of 20th century insights, particularly those of Russell and Whitehead.

Perhaps it is, as Wordsworth said, that the infant (at least the fortunate, unimpaired one) is born trailing clouds of glory and that it is only the adult world which causes "shades of the prison house... to close" upon the growing boy. Similar ideas about our innate potentialities were also expressed by the 19th century New England transcendentalists.

It may be that most education tends to dim and obscure this early mental and moral clarity, and that the more gifted children are those who retain the vision longer than others. Certainly there is unlimited evidence that gifted children can do amazing things with their minds, and that their interests lead them to ask profound and searching questions.

It is important that the gifted have an opportunity to develop their potentialities. As e. e. cummings said, "Youth's one need is to transcend itself." Growth, positive development, evolution are the urge of each organism. "Capacities clamor to be used," Maslow believed, "capacities are needs." Since we have varied talents—mental and physical, aesthetic and spiritual—we enjoy life more, feel less thwarted, if we cultivate them and let them bloom. Growth—intellectual, artistic, empathic—can continue throughout life. Studies have shown that intelligence can and does increase, people can "find" themselves.

Gifted people, however, especially those whose "capacities clamor to be used," can easily become embittered. Girls early show talent, particularly in verbal, aesthetic, and empathic skills and sensitivities. In fact, the tests in our research studies showed girls to be superior to boys in the aesthetic and altruistic realms and certainly as creative as boys in many other areas.

Women have found it difficult in the past to develop their talents. The routine tasks of doing housework and herding the children were considered appropriate for all young women, even those with great scientific talents, artistic flair, genius in the use of words or the leadership of people. Encouragement for their writing, scholarship, or social leadership was usually lacking. Mental health studies in the 1960's showed far fewer girls than boys in guidance clinics as children or adolescents, but more women than men neurotic at age 40. Talents stultified are reflected in a deterioration of mental health.

In all this I am not only concerned with the lack of self realization, but also with the loss to the

society of the talents of the highly gifted and morally mature. The world today is in particularly short supply of people with humane concerns who are in administrative positions. Far too many of those who "run things" do so because they want power and like to throw their weight around, not because they wish to help others. In a country of private affluence and public squalor there can be no question but that the artist's touch and guidance are needed. And in a land where the great beauties of nature are threatened and destroyed at every hand, the dedicated naturalist is essential.

There has been, as we all know, a great proliferation of new facts and theories in this century. As with fact, the boundaries of subject matter and disciplines change continually. Based as these boundaries are on assumptions about the nature of the discipline (or matter or the world), these boundaries change with new discoveries. As Thomas Kuhn has shown in *The Structure of Scientific Revolutions*, it is by these new insights or intuitive leaps that the great "revolutions" or changes occur in science. Suddenly someone produces a new idea, a novel way of tying things together, another point of view, and the "paradigm" (as Kuhn refers to it), if accepted, can transform the world view. Gifted students must learn to be comfortable with such ambiguity and incompleteness, to know and accept that nothing is ever finished and much remains incoherent.

The Purpose of Education

Some think the essential work of the school is to disseminate knowledge. Their view is that children, and especially the gifted ones who might be expected to become leaders, should learn the major theories and "facts" of their time. The second view, one which I share, holds that the primary purpose of education is to help young people to become better human beings. A third position, that schools should teach students to learn to learn, is concerned more with the process than with knowledge itself. This premise recognizes the ephemeral quality of much knowledge and emphasizes the limitations of the mind as a storage receptacle.

As intelligent beings, we all need to have a store of information about the past and about our contemporary world. But there is an obvious limitation to this approach. As we have seen, much of what is regarded as factual knowledge is fluid rather than solid, transitory rather than permanent.

Although I feel that the heart of a good education is personal growth, there is a way of thinking about and defining knowledge that does not sepa-

rate knowing from being and becoming. I refer to the concept of *superior knowledge*. It is defined by Michael Polanyi as that which is coherently believed "to be right and excellent."

Superior knowledge is not an endless proliferation of facts and ideas. Unlike science it does not double every 10 years. Instead it is comprised of certain underlying themes which could be called rules to live by. They are found in all the major philosophies and religions of the world, in the great classics and the scriptures. Timeless and eternal, such knowledge conveys the essential truths of the human condition. In Thoreau's view all wise men have asked the same questions we ask and "each has answered them . . . by his words and his life." Thus gifted students should study what the saints and sages have to say and how they have lived their lives.

Where education can help is in presenting and clarifying this knowledge and encouraging students to act accordingly. Everyone has some knowledge, conscious or unconscious, of what is good and what is bad. Superior knowledge is not necessarily the property of the educated. Emerson stated, "There is a certain wisdom of humanity, which our ordinary education often labors to silence and obstruct."

It is not that the lessons of the past have been neglected as a teaching source. Many would say they have been overemphasized. Yet, too often these studies were conducted as scholastic exercises. Students were not advised to apply their knowledge of the good to their own lives.

There are many ways that even young gifted children can make this world a better place. But they are rarely encouraged to do so. How often do we suggest that they live by, and take action in terms of, higher values and superior knowledge? Nevertheless, all who try such approaches find youngsters most inventive when the challenge is held out and doors are opened for them. Without such opportunities they are apt to feel powerless and defeated before they are over the threshold of their lives.

Not only can we place an emphasis on superior knowledge and thus help students better understand themselves and the world, but learning can itself become more humane and satisfying. The objectivity required of the data collector, the mesmerized memory work that is the lot of the student, would both change if the view of knowledge changed. In Emerson's words, "[Schools] can only save us when they aim not to drill, but to create."

The work involved in study or scholarship can be meaningful in its own right and can also serve as a way of discovering oneself and bringing meaning

into one's life. For example, ecology, sometimes called the "subversive science," is not only rewarding intellectually, but also gives us the added satisfaction of knowing that we are improving our environment and preserving nature's harmony. Virtues such as gentleness and mutual aid are central to the discipline, and its study can suggest how we might apply these qualities in our own lives.

The third purpose of education, helping students "learn to learn," was widely discussed in the 1960's. Under this general rubric we can include study skills, learning to do experiments, and using reference libraries. However, the most important aspect of learning to learn is learning to think critically and creatively.

An Experimental Curriculum for the Gifted

I would like to share with you the development of an experimental curriculum for the gifted in the Lansing Public Schools in which we tried to use some of the ideas about knowledge and self understanding I have just discussed. We wanted to determine whether we could teach critical thinking and produce changes in student thought patterns. These did not occur in the conventional classes that used textbooks with tunnel vision and a bland point of view.

The students and their teachers (who were also trained as counselors) were involved in every aspect of the planning and production. I feel that much of the success of the program was due to this involvement. It was their program, not one developed by an outside agency and arbitrarily imposed as a teacher-proof package.

Our first concern was that the students grow in moral and ethical ways, and that they learn to think and to care. Thus our curriculum focused on studies both of the self and of others; broadly speaking, the world. For many years, students had been complaining to me about social studies:

We study American History in the 5th grade, the 8th grade, and the 11th grade. Every year the pilgrims come in but we only get to about World War I; then we have the last 50 years in the last 50 minutes. When are we ever going to study about the world we're living in right now?

To answer that complaint we began the new course with a study of the world as it is. However, we were careful not to give just the negative views common in the media. We made an effort throughout to share prospects as well as problems. We wanted to present positive images of humanity — as potentially good or transcendental, as well as nega-

tive ones - man as a caged beast or a programmed robot.

We felt that it was essential to reinstate hope and optimism, to show that there is much beauty and love in the world within everyone's reach. The best things in life are free: a baby's smile, the early morning dew on the grass, the sharing of exciting ideas with friends. And other great goods - philosophy, religion, and the arts - cost very little money.

The problems that we discussed in our course were overpopulation, technology and ecology, war and peace, large versus small organization, and materialism and conspicuous consumption, to name a few. None of these had a simple answer, and most could indeed be looked at more than one way. In this program the students did not deal with just one topic but with a number of significant questions, and they came to see how all were inter-related.

The world which we finally presented was in a loose-leaf, open ended form: the *Four World Textbook*. The four worlds were the natural, the technological, the aesthetic, and the human. Each consisted of about 30 multilithed pages which were made up of a variety of clippings, drawings, and typed excerpts. Students could make of these worlds what they would, adding and subtracting pages and, in effect, developing personal anthologies.

To bring students back to the person and to human potentialities, to give them passports to their own territory, we had produced 30 minute style of life films of 10 creative, philosophical, and socially concerned men and women. We wanted students to meet adults who were more "fully human," both in terms of philosophical depth and in the joy that they derived from their work.

The *Being and Becoming Film Series* and the *Four Worlds Textbook* were the core materials for the new program. Both the text and the films were used in the context of class discussion. Students were encouraged to present their viewpoints orally, a new experience for many, and to engage in confrontations and dialogues with their peers and teachers, using as subject matter the issues raised in text or films or by the students themselves. The talk was never dull and never teacher dominated. Ideas ranged from the concrete and personal to the abstract and philosophical. We felt that education can and must be concerned with issues of crucial importance to the world. It must assist the developing self as it struggles to find a personal identity and a place in a meaningful world.

Perhaps due to the heated discussions, the lack of final or absolute answers, the continual involve-

ment of the students, the total front approach, the fine preparation and dedication of the teachers, and the persuasiveness of the people who were the film models, we were able to achieve significant gains in critical thinking as well as in many other areas when the new course was tested experimentally.

In Search of the Ideal Learning Environment

I have had a series of recurring dreams about the ideal learning environment for the gifted. Over the years I have written designs for a "learning center," and in my homes in East Lansing, Michigan, in Portland, Oregon, and now in Berkeley, California, I have built extra rooms for seminar use. From my experience I would say the furnishings must be comfortable and attractive with food preparation facilities near at hand and with nature visible at the window and accessible at the door, available for a stroll or sunning. Many teachers have had the experience of taking students into a beautiful setting, particularly one redolent with nature, and finding even the bored and the unruly transformed.

In *Learning Together* I described the "new community" which selects a section of a city (Portland, Oregon) as a learning mall and involves people of all ages and a variety of occupations. Particular use is made of the forest areas, parks, gardens, zoo, science museum, city library, the art museum and school, and the historical museum. Gifted students who have long since met their academic requirements often do not need to attend classes on a regular basis, although they may eagerly participate in philosophy seminars or enroll in university classes or apprentice themselves to artists or artisans.

Continually I search for alternatives to the 2 x 4 classroom, the child incarcerated between the two covers of a textbook and the four walls of a single room. The two most exciting elementary schools, involving students of a variety of ages, that I have seen recently are located in very different settings. One is in a suburb of Copenhagen, the Bagsvaerd School, and the other, The Old Green School, is in Canby, a small town in Oregon. Both accept children from about 6 to 14 years, although the Oregon school has some older ones.

At the Bagsvaerd School, children were self selected by their own interest or because the philosophy of the school appealed to their parents. Although the educators of Denmark say little about "gifted children," many of these obviously were just that. With five teachers and sixty-some children there was leeway for individual help. Students were encouraged to read, do science experiments, create

art, make music, and work together in a variety of ways.

Given freedom, the teachers found that children could work through their problems. At the beginning many students reverted to behavior that has been common in schools through the centuries. Some of the big boys, aggressive and egocentric, fought with each other and lorded it over the other children. There were about 500 brilliant green enamelled boxes (donated by Tuborg Beer) which were to be used for partitions in the large room. At first the older boys made two competing castles and then proceeded to wage war. The smaller children—not yet wise to the ways of the world—objected to this behavior, sent emissaries to the strongholds, and finally talked the malefactors into helping them make a ship which schoolmates clambered into and where all began playing and working together.

Many of the customary problems that teachers usually confront simply did not exist in the free situation. The young children profited especially, taking responsibility for many things, including running the school food program. There was no great pressure to learn, but it was found that, with excellent teachers as consultants, the students became deeply involved in many projects. They rarely used textbooks; instead they read all manner of current materials, including newspapers. Those who enjoyed reading requested a quiet room just for that. Almost everyone demanded that a soundproof room be provided for the musicians.

The Old Green School had ten or twelve fewer children than Bagsvaerd and two teachers rather than five, but the pattern was similar. At first they inhabited the basement of an old school building complete with nooks and crannies—reading alcoves and hobby closets. In the spring of 1974 this building was destroyed by fire and the school is now housed in a vacated symposium. But excitement for learning is unimpaired. All ages and kinds of children work together with boundless enthusiasm. Even the youngest take on projects of enormous scope.

Young children read adult books without fear of criticism. And there were always, in both schools, enough adult volunteers to supply talented conversational partners for many of the more intellectually adventurous children. In Canby as well as in Copenhagen children wrote books of imposing length, did large scale art projects, and conducted impressive science experiments. Several of the Bagsvaerd children had typed and duplicated novels. But more important than any of this was the sense of community that prevailed and the fact

that there was in each situation far more cooperation than competition.

An alternative high school of outstanding quality, one that truly "works," is the Off-Campus School in Bellevue, Washington. Populated solely by drop-outs from the conventional schools and housed in a beautiful modern building (a former church) in a parklike setting, this school has been open for a little over four years. Despite the basis for student selection (they must have been dropped or have dropped out willingly), an urbane and gifted teacher, Glenn Holden, assured us that this was in many ways the most intellectually demanding of the Bellevue high schools.

Most of the work is accomplished outside the school after the student and the teacher have decided which direction the reading and the other activities will take. Such freedom in allotting their time allows students to fit in studies with work schedules. Creative dramatics, yoga, physical education, and hiking are done in groups. But the academic subjects are taught in a series of individual tutorials which consist of discussion and evaluation. Students never fail to show up for these and rarely forget their assignments, because it is they who help choose what work they will do and who will call in for their appointments. In contrast with the normal load of six classes in conventional high schools, a student at the off-campus school generally concentrates on one or two courses at a time. These are often finished in a short period of three to six weeks.

Student attitudes were good. They could work at their own rate, put questions directly to their teachers and expect to get answers. Integration of subject areas as well as of work with study were possible. For example, a unit in genetics has been used to lead into a mathematics unit on probability. In general, the aim was to encourage individuality and to enlist the students' own interests. The school accepts as its theme Thoreau's dictum, "If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music which he hears, however measured or far away."

There are a number of qualities that must be present in a good learning environment, but they cannot be established by fiat. The teacher as conductor—in both the sense of conduit for an electrical charge and as a maestro—is the vital factor. A good environment is one that helps all to feel accepted and free to be their best selves. As William Jennings Bryan said, "People should be allowed to make their own mistakes." Gifted students should be given enough rope, not hang themselves, but so that through exploration they will see

the range of possibilities. Love is vital to acceptance, the central ingredient.

The environment should be more than free and accepting, it must also be responsive. Where bright students ask questions — and they ask many, that's one way to identify them — the responses should whet their desires to learn more and continue with their queries.

For the gifted, responsiveness in the environment is still not enough. There should be memorable ideas and things to contemplate, and what Whitehead called "vivid" people. We learn best, Emerson felt, not by "instruction, but [by] provocation."

The Role of the Teacher

- The teacher's role, I believe, is more that of a facilitator and source of inspiration than of a fount of knowledge. Max Lerner has spoken of the incandescent teacher, and there is an old saying that to kindle another you must yourself glow. We all know that there are people we feel warmed by and others who leave us cold; some who kindle our imaginations, others who dampen our enthusiasm. Perhaps it is, as Goethe believed, that we only learn through those we love.

As you probably have gathered, I believe that kindness is a more important quality than intellectual sharpness. Certainly a teacher needs both emotional and ethical maturity, along with intellectual depth. The film models, as well as the teachers in the *Being and Becoming* program, all talked about what they believed in and cared about. The students responded by saying they had never heard an adult discuss a philosophy of life before and this was a very meaningful experience.

Carl Rogers has written movingly on the point that no one can teach another; we can only learn together. This is the "letting be" of Lao-Tzu. My view is that in all education we need a combination of this Eastern nonintervention and Western challenge. *To lead out* is the literal meaning of the Latin verb *educere*, from which the word education is derived.

Despite what I have said about the importance of kindness, the need for the teacher to be the students' friend, to be on their side, if necessary to be their advocate, I also believe teachers should know something. They should like to learn; they should

be expert in at least one area; and the most gifted should become philosopher generalists. Taking a student by the hand and saying "let's go look it up together" is not enough. And the negative function of getting out of the learners' way while they look up things for themselves is not the proper role for the teacher. Gifted students need to find their intellectual kin, those who also care deeply about ideas. The teacher who can ask the trenchant question or point to a new way of looking at a problem is needed by the gifted at all ages. But this must be done in the manner of a Whitehead whose friend Lucien Price reported, "There was not a grain of ill will anywhere in him; for all his formidable armament, never a wounding word."

It would follow that teachers not only need to like gifted children, but they should also revel in their minds rather than being threatened by them. Basic to liking the gifted is having a positive image about human beings. I tend to believe that thinking well of others and of yourself are of a piece.

I feel strongly that teachers need opportunity to keep abreast of their subjects and their times. To do an adequate job of teaching I believe no teacher should be asked to be on the firing line in classroom teaching more than half a day, perhaps only 10 to 15 hours a week. Teachers need time to think about their students, to do research on their subjects, to renew themselves. If they are to be models for the gifted, the writers need to write, the musicians to play, the scientists to experiment. How can teachers have the excited minds found among the creative if they are dead tired?

The first two chapters of *Learning Together* are about the problems of a gifted young creative intellectual, Don Saxon. He had some excellent teachers and some very poor ones, and his record fluctuated like a yo-yo in these various settings. As with many of the more sensitive gifted young people, he would refuse to learn if sufficiently at odds with a teacher. But Don thought teachers were very important and knew what he would like them to be:

What we need is people who vibrate knowledge — teacher philosophers. People who create things! Capital E — Empathy. Capital T — Truth; Capital L — Love.

The Gifted Student: A National Administrator's View

Bill McLaughlin

AT ONE time I had ten National Merit finalists in one class. Some of us have had these experiences, and it was the kind of thing that hit me about the time the students were beginning to ask very hard questions. Some of these students went on to lead the Free Speech Movement at Berkeley and were quite active in the early 1960's in some of the activities that took place on postsecondary campuses. This aroused my interest in terms of what we have done that might be positive or negative in terms of the education of these talented young people.

Three Problems

I think there are three problems we face in the school situation which should be addressed in a positive way. The first one is this terrible urge to organize for predictability. We have to find other administrative vehicles that will give us room to deal with the unpredictable and to accommodate it, understand it, and support it in the school scene. The Philadelphia Parkway School probably is one extreme of something that is organized but

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has unpredictable elements. But where in our organizational patterns can we really wake a child's interest factors and change the whole stream of events overnight as the child suddenly catches that spark? We might go home and write another seating plan for the next day. The new seating plan might be just as sterile as the old one and neither one of them might be related to what the child had on his mind. How do we set up schools in such a way that we allow the unpredictable element to enter in?

The second major problem is community abdication. I really feel that the principal leaders in most of the communities in this country have really abdicated, by and large, their gut level commitment to young people of all kinds, but particularly to those who may annoy them in terms of talent and giftedness. A specific instance: In California I met with people from the city of Irvine, and they asked me to comment on how I saw educational ideas for the city. They have millions and millions of dollars, great affluence there; they have the land; they have controllable possibilities. I said, in essence, there is no place for young people in Irvine, there is just no place. Your representative roles are all built around apartment representation or condominium representation, or some other - tennis court representation, swimming pool representation - vested interest at the adult level in terms of self service. You have an art show going on at your beautiful shopping center, and it is not a student art show, even though school has only been out a week. It is a professional art show and the whole thing is venerated to a very high degree. There is no place for the kids to come and bring an expressive effort in the art center. You really have a sterile environment, in what should be considered a model city of the future. But then I had to admit something. Over 15 years ago I was a teacher in the same area and I saw the same thing happening, so this did not surprise me, we have great affluence in many of these community

settings but no real place. The kids are virtually senile adolescents. They are aged so quickly in isolation from what is happening in the real world, and I do not think the communities are letting them into the game.

Another example: At a meeting of teachers of English as a second language, in San Francisco, I indicted a nearby bank finishing its 50 story building because originally there was not one single floor in that bank building which brought those kids from Chinatown, within the shadow of the building, into that bank to understand anything that might be going on there, that might even vaguely relate to what those children in Chinatown were doing, other than a routine field trip around the big black rock in the front. I said, "Use a whole floor of this building to bring those kids at appropriate points into the life of commerce in the city of San Francisco." I think gifted children and youth are rejecting the commercial leadership role, for example, or the industrial leadership role. They see no reason to seek it; nobody has made any overtures to them. Businessmen are like the politicians in this world—the gifted children do not see any reason to be either one. Now the politicians make overtures to them. They are still suspect, but the commercial and industrial leaders could open up their doors. So I think there has been community abdication where there could be highly productive responsibility.

Third, we have this self image thing. As a secondary teacher most of my teaching life, I used to rebel at words like self concept, self image. We have done a lot of studies about peer group relationships, and we have made it pretty clear in our research why peer group relationships are important to survival. But I do not know where the major studies are that tell us why it pays *not* to be a peer group individual. We have geared our whole system tightly to self image in peer groups. There we stand, and few children move outside it. The students in recent years have created their own outside peer group, and if you do not watch out, it is coopted overnight into an inside peer group and gets manipulated for other reasons—clothing, records, violence, what have you. Whatever we do in school, we have to give the gifted the emotional support to be different. I have seen and worked with Boys' Club activities in the inner city, where a simple hand on the shoulder was all the emotional support that a child needed to go on and do something. I think that if you are working with the gifted you have to understand the emotional support problem and the implications of self image for the talented.

A Wide Spectrum of Resources

We need a wide spectrum of resources for experience. Many city schools are back to a basic four and one at the secondary level. They have the required English, the required social studies, the required basic mathematics, required physical education, and maybe there is one variable allowed; but that is not a wide spectrum of resources, particularly for the kind of teaching that works with gifted and talented children. These children need quality humans around or they need exposure to them. And that is not me as the classroom teacher; that is a Jascha Heifetz if he happens to be in residence there, or a Picasso if he lives around the town someplace.

I did a paper for Dr. Allen when he was the Commissioner of Education, using San Francisco City Schools as the model structure, and I proposed that for every 10,000 students we would have a Scholars in Residence Unit of some kind which would consist of the outstanding teachers and residents of that immediate area. Our promising kids would be routed to these people when the spark came. At the city level, we would turn some portion of the city, like the Philadelphia Parkway School idea, into a Scholars in Residence Center where the children could go to a human contact who happened to be a superior person in terms of abilities and talent. Gifted and talented children could then begin to be able to identify with that person. There is a wide spectrum of resources that is literally closed out for a lot of our children.

I was reading about the gang structure problems in Philadelphia the other day. It used to be those youths could roam at least six or eight blocks but, according to these stories, they cannot roam more than half a block. They are literally tied into a geographical area no bigger than a football field for purposes of their own survival. If the schools cannot get them out of that kind of box, then nobody can. This is a specific example that points out my deepest concern, and that is the huge population problem—the issue of the urban area and the fact that literally thousands of children perish under those pressures. Whatever abilities they may have even on a normal scale never really surface, particularly the children who may have unique interests or talents of some kind. They are physically isolated from experiences, and until they get into these experience levels they are not going to go beyond the physical modes immediately around them. Of course, desegregation is helping some. But we do not really know what its full implications are going to be. The movement in some cases simply transfers the same package from where it was to where it is now, minus some of the

human warmth that might have been there when the kids were back where they were. This is an uncertain way to open human resources and widen experience.

Neglected Areas

We need to stress the fact that the good mind and the thoroughly explored and exploring individual are the basis of responsible decision making. On the campuses of this country in the 1950's and 1960's we had a constant onslaught of young people, yet in many ways they were assuming a responsibility that was probably not assumed by most generations. Someone asks, "What are you doing about teaching responsibility?" You become a more responsible human being in the use of what research or knowledge you have. Our country at present does not really see responsibility in this context. Responsibility in our country for a long time has been all too frequently an obedience training process in the schools, not a process that makes individuals responsible through building decision making capabilities and better able to live with what they have decided.

In our society we organize for predictability more than for responsibility. We cannot predict what the taxpayer is going to say next or what anybody is going to do next, but we constantly organize to get ourselves as predictable as we can. As a school administrator I fought constantly to stay away from predictability. A board member asked one night, "We put in courses in the humanities; what are the humanities?" He wanted a list. An hour later I was still trying to give him an answer that he could live with, still vote for the humanities, and yet not have to go back and face the taxpayers with the unpredictable and get voted out of office accordingly. I think we are in a context in our country where we do not really encourage the individual to feel responsible for himself or to continually use talent in unpredictable ways.

Another neglected area is precision. I was talking to a group of students in a humanities seminar about three or four years ago and I said precision is really one of the most essential things to using your talents, be it in the poetry of Leonard Cohen or any other area. I brought up the issue of precision in love making as an example (these were 18 year olds) and they thought about that for quite a while before they even began to react. Where are we in terms of philosophy in this whole area? How do you do something artistically but with some precision so that there is not just a primeval urge? It seems only natural to expect precision as a part of giftedness.

We have also neglected enjoyment of life. There

is a rare Arabic phrase. "I'm ahead of you in appreciating and enjoying life, now catch up with me." That sounds weird, but I am thinking of how many classrooms I have gone to where nobody in the room said they were enjoying things and where nobody was willing to say that kind of thing.

What I am pressing for is that somewhere in our configuration we have got to come to some thoughts about what we ought to suggest to people. What are the components that you would put into a decision?

Children can be responsible: they can create functions and roles. In the elementary and secondary schools the teachers need breathing time and the children need their released experience. For example, if our math teachers had had time to think in the 1960's, they might not have been caught up as heavily as they were in what is now being indicted by the modern math leaders. Nothing was done for 400 years and then they tried to revolutionize things all at once. They were not sure, and their whole way of thinking was not integrated. So we had to process them. Well, we processed them and packaged them and got them fairly organized and into the sets and all that. Zacharius spent millions and millions of dollars and got things going across the United States in curriculum and nobody loved him for it. There was just power there that came with the materials, and wham! We have got to do the yellow book, or else, because our children are smarter than the green book or whatever it is. That is part of the period when we were exploiting those children. We were moving them. On the last day of school, I asked them, "What do you think of our effort? You've been with us three years in an experimental high school now." And one of them said, "You've created a suburban Devil's Island." So we really have to release them from the time restraints, and the physical location restraints, and give them freedom to make some decisions about the direction of their own education.

Grouping

I think that one of the major problems in grouping is the fact that we have grouped for grouping's sake. We have not recognized the interest factor. We have not really eliminated the sterile cafeteria of college prep, five of these and one of those. Instead we need to insist that beyond the five of these and one of those there might be 50 to 100 other potential ways of grouping students in a school, be they young children or secondary school students. Most school counselors tend to work with the numerical factor alone. We have a six period day. Their charges are put into a grouping situation three out of the six, and the other three are

made into requirements. What happens as a result of this split is not assessed. We simply assume the physics teacher is automatically trying to do something about physics because he has a group. I find that does not happen most of the time. The English teacher gives them a few more books, and the history teacher gives them a few more assignments. I think that we need to look at school designs in laying out the options, that we go into variables of 50 to 100 potential ways of structuring the educational experience, rather than simply saying that you have six periods in the day and no more. When these children are given these variables in experiences, they should be available to the teachers too. Get the teachers away from the building part of the time. They need it as much as the children, and their teaching just might become inspired.

Initiating Programs

How do you get these programs under way? I think that the question which we should think about first is how to work with the attitude question at the local school district level in planning and moving programs, because the cynicism about federal aid to education is fairly widespread. The federal bureaucrats say, "All right. You bring a project in for twelve months." We hire teachers and we will get the show going. Then the cork gets pulled and we are in trouble again. I have a very serious indictment of practically all federal agencies since 1965, because where dollars were available in sizable amounts for the necessary efforts, almost none of those dollars went to any effort to sustain or encourage something called giftedness in children - almost none at all. And now we find ourselves with the consequent problem of asking how we are going to continue to serve these children. When we have had the money, we have not used it to pull children out of negative and into positive experiences.

We need to work more toward a state role in planning. In most of the work we have been doing out of the Office of Gifted and Talented, we have

been very heavily involved with state leadership, and I think that there is a healthy attitude regarding the federal intervention mechanism. So first, become aware of help available at the state level. Analyze your staff for leadership potential in this area. Then go before the Board of Education, not to say you want to start a program for the gifted, but to say that you want to identify what you are currently doing which could be improved. Go to the Board gently and say, "We're going to start a little search for those things that look promising in the district. Not to start a new program, or a revolution or anything, but to see what we're already doing." They will feel good and you can come back and say, "Look, here are the wonderful things we're already doing, but this is only 10% of the performance that we really could be accomplishing because we have x number of children who qualify who don't have any programs available."

What I am sneaking up on here is quantification for program purposes. Now that is a bad phrase in this day and age. But when you begin to develop a program for something in a school system, you have to quantify it. You have to bring it back to a base of some kind that says to Joe Doaks on the Board or Sally Smith: It is going to cost you x dollars to get this thing going. We have got to come with two or three of our own ideas. We have to say there are x number of children in America who are being deprived of the spectrum of experiences that would use their talents better and, district by district, all children deserve certain good teaching practices, especially those with remarkable abilities, innate or acquired. We have 150 or 500 or 1,000 identified who are starved intellectually, emotionally, and culturally. Taking those 1,000 as a base let us set some objectives toward which we can move. We do not have to be defensive. These children really need all the help we can get for them, and we have to ask for this help in terms that the schools and school boards can acknowledge. In a time and world of uncertainty I can imagine no better act of faith than to turn on and turn to our gifted and talented.

Instructional Planning for Gifted Disadvantaged Children

Alexinia Baldwin

IT IS sad when a "pint" is expected to yield a "quart" and fails to do so, but it is a tragic loss to society when a "quart" produces only a "pint" or much less for lack of proper societal effort and programs.

Historical and current data which give evidence of the great contributions that have been made to society by men and women from culturally different or economically deprived backgrounds reveal that these men and women were singularly strong and determined in spite of overwhelming odds. There were only a chosen few who, through the generosity of philanthropists, had an opportunity to develop their potential to the highest in schools of high prestige.

These outstanding people would be classified according to today's terminology as the *disadvantaged gifted*. There were many other boys and girls who like their well known peers could have contributed greatly to society if they had (1) had the stamina to withstand the unequal and unfair societal prejudices or (2) had sponsors who provided the necessary contacts and monies for extensive training.

Andrew Jackson Beard, a slave near Mt. Pinson in Jefferson County, Alabama, never learned to read and write, yet he invented the *Jenny Coupler* which automatically couples railroad cars when they bump together. Beard's contribution saved the lives of many men who had to lock the coupling device by hand. Garrett Morgan invented the first

automatic stop signal, and filed 150 electrical patents. Daniel Williams performed the first successful heart operation, Jan Melitzer developed the shoe last, Madam C. J. Walker was a cosmetic developer and manufacturer. These and many more less well known gifted people are members of the largest minority or disadvantaged group in the US: the Black American. This group of gifted people bears evidence of latent talent that emerged in spite of the social and economic characteristics of the period of their lives from the middle 19th century to the early 20th century. Few schools were open to Blacks during this period and even fewer colleges.

Achievements in this vein continue today. George Carruthers, a Black scientist, won the 1973 NASA Exceptional Scientific Achievement Medal, for his development of the lunar observatory installed on the moon by Apollo 16 astronauts. Thomas Bradley, the son of transplanted Texas sharecroppers, is the new mayor of Los Angeles. These achievements have been recorded despite the fact that systematic programs for talent development of gifted disadvantaged children are still more an exception than a rule. Indeed, Bradley, like many gifted Blacks, was advised by counselors to forget about planning for college. He ignored this advice and went on to graduate from the University of California.

It is surely America's loss that brain power in a rather large segment of the population is not systematically developed. This is not the case in countries from which intensive economic competition is being received and for which a favorable Hertz-Avis trading position is being developed in an increasing number of areas.

In addition to inadequate school programs, the use of inaccurate tests causes talent to be stifled or destroyed in minority communities when it could have been used to build our society. The most damning of the instruments has been the use of achievement and IQ tests to determine the pres-

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ence or lack of talent. This article will not concern itself with identification, but I personally feel that identification and prescription should go hand in hand with a circular feedback system in gifted programs. An effective system places the emphasis on prescription wherein identification instruments become tools for indicating unusual strengths and talents instead of measuring what has been learned. The Torrance Tests of Creative Thinking (Torrance, 1966), for example, reveal a child's ability in the area of divergent thinking. It gives the child's strengths or weaknesses in the ability to be flexible, fluent, and original in the manipulation of verbal and figural symbols. The Alpha Biographical Inventory (Institute of Behavioral Research in Creativity, 1968) identifies the talents of individuals which are important for academic pursuits and a variety of other work situations, and Mary Meeker's (1969) use of Guilford's (1967) structure of the intellect to point out areas of strengths and weaknesses, are a few examples of identification methods which aid in planning and provisioning. All reveal hidden talents of disadvantaged children which IQ and achievement tests are unable to uncover.

Philosophically, I feel that all human beings should have an equal opportunity to develop their innate abilities to the fullest. Believing this I would then say that those children who are talented should experience curricula which are differentiated and distinctly designed to meet the needs of those special talents. Heterogeneous grouping is highly desirable, yet homogeneous grouping should be provided sometime during the day or week in order for these students to benefit from the challenge of like minds. Such a curriculum might be referred to as varied or individualized. Whatever, it is characterized by four distinct features: provisioning, programing, teaching strategies, and learning activities. These are discussed in turn below.

Provisioning

Provisioning includes the organizational pattern most conducive to the teaching of children with unusual talents. Materials provide flexibility and variety in activities required.

There are many possible organizational patterns which will develop the talents of disadvantaged children. Some are listed below:

1. Team teaching, provides multiple talents and specialties in the classroom.
2. Open education, as it refers to structure and educational ideology, provides the student an opportunity to develop independence and self motivation. It also provides the student with an

environment which provides for different learning styles and a fast pace.

3. Resource centers in central locations for school districts or in each school provide needed materials.
4. Mobile resource centers are an option in rural areas.
5. In and outness in the school day. This is a design which allows gifted students to work for part of the day with specialists in the community or in neighboring colleges.
6. Extended school days. Special after school activities including Saturday activities provide time for projects.
7. International school rooms. Children and teachers use special aviation and other transportation rates for extended classrooms in Canada, Mexico, England, etc. Money is surely a deterrent here.

Tools are important in any organization. Some are listed below:

1. Books in plentiful supply provide for various interest and ability levels. Reference books should be easily accessible. The school librarian or local librarian can assist in acquiring an adequate supply of books. Each child can use his library card to select books which will be placed on the school shelf for the period of the loan and made available to students during this time.
2. Art supplies: basic materials such as crayons, paints, brushes, and paper. Discarded materials can be used to advantage.
3. Use of cultural artifacts: Children should be encouraged to use familiar objects to provide bases for discussion or exploration.

Programing

Programing or instructional development for gifted disadvantaged children includes the usual components of curriculum development: (1) objectives (what are we doing?); (2) learning activities (how are we doing it?); and (3) evaluation (how are we going to know we succeeded?).

The following writings are valuable as a frame of reference: (1) Piaget's (1960) developmental theories; (2) Guilford's (1967) structure of the intellect; (3) Mary Meeker's (1969) interpretation of the structure and suggestions for its application in class; (4) Bloom's (1962) and Krathwohl's (1967) taxonomies of educational objectives; (5) the hierarchical arrangement of skills listed by Ausubel (1968) and Phenix (1964); (6) Ward (1961), Gowan (1964) and others in gifted education; (7) Torrance (1962), Renzulli (1972) and Williams (1969) for creativity; and (8) Toyne (1964) and others in education of disadvantaged.

The gifted disadvantaged child has a capacity for abstract, divergent thinking along the higher levels of the various hierarchical arrangements which is outstandingly different from and greater than that of the average child; therefore, planning in these categories, that is, objectives and learning activities, should reflect, over a period of time, emphasis in these areas. Said differently: We want to make sure we stretch these young minds.

As a precautionary note, however, I would like to add three things:

1. Capability for operating at higher levels of the thought processes does not preclude the lack of need for development in the lower levels. It is only that these children will need much less time to develop the lower level thought processes, i.e., memory, comprehension, etc.
2. Disadvantaged gifted children often exhibit their innate abilities in ways which are not always standard. It is important that we understand the intellectual skills being used in the exhibited behavior, and the cultural context of its origin. We then build on those areas of strength and develop those areas of weakness. For instance, a child might be able to recall numerical groupings because he has had practice in his home or community activities. He may be strong in figural symbols but weak in verbal interpretations. This student then should be directed to develop horizontally those special skills he possessed at his "entry level" while being directed vertically on those skills in which he was weak.
3. The gifted disadvantaged child will need more initial support in his new opportunities to explore.

A fine program with which I once worked was designed in three phases. Phase 1 developed basic skills and was more structured; phase 2 increased the planning freedom of the students; and phase 3 extended this freedom and increased and encouraged pursuit of individual interests in and out of school.

Teaching Strategies

Teaching strategies, of course, go hand in hand with the teaching models which I referred to earlier and are perhaps more important. The following points are worthwhile for teachers of all children but especially important for teachers of the gifted disadvantaged.

1. There should be an emphasis on learning patterns or process in the ongoing activities. Questioning which involves memory, translation, interpretation, application, analysis, synthesis,

and evaluation is central in allowing young minds to roam. Sanders' *Classroom Questions: What Kinds?* (New York: Harper & Row, 1966) is a good source for teachers to read in efforts to challenge their young charges.

2. Learner-participant teachers are effective with these children. Discussion and exploration of ideas involve teachers in the learning process itself in these classrooms.
3. Simulation games, research through films, interviews, and computer assisted instruction are just a few of the options for learning a good strategist might employ.
4. Emphasis on creative thinking is vitally important.

It is desirable to consciously and deliberately engage the students in the creative thinking processes at the same time that they are engaged in their pursuit of knowledge and skills. The following list with its suggested "cueing strategies" does not explore the full range of creative processes, but the suggestions will have particular application for classroom use.* These strategies are:

1. *Elaborative Thinking.* This involves embellishing or refining an idea; adding new and necessary details for purposes of communicating a new idea.

(Say to your students:)

- When you describe it, leave nothing to the imagination.
- Be as descriptive as possible.
- Expand and detail the changes you would make.

2. *Fluent Thinking.* Production of quantity of ideas, a free flow of ideas for the purpose of producing the most relevant ideas in a given time.

(Say to your students:)

- Produce as many ideas as you can for . . .
- Stretch and expand your thinking so that you may list many things that . . .
- List all of the consequences that the problem suggests.

3. *Flexible Thinking.* Variety of kinds of ideas, a number of different approaches, thinking branches off into contrasting classes, shifts categories of thought and detours the direction of thought.

*For further help in Cueing Strategies for Teaching Creativity write to: Frank E. Williams, Professor, Portland State College, Portland, Oregon.

(Pupils can be asked to:)

- Give different kinds of reasons for
- Produce contrasting hypotheses for
- Give the many different meanings of the word
- Produce a variety of ideas for

4. *Willingness to Take Risks* Setting greater goals for greater gains. Involved here is speculation, supposition, presumption, and venturing to guess. Risk takers who enjoy participation in activities involving chance and adventure are well served here.

(Set them off by directing:)

- Prepare your plan and go ahead on your own.
 - Speculate on the outcome of
 - Now that we have this information , what is your prediction?
5. *Preference for Complexity*. Ability to handle involved details and to cope with knotty problems, inclination to toy with intricate ideas and to dig into difficult problems or solutions.

(Use cues of this nature:)

- What are some of the things that people do now that in all probability will have to be done differently 50 years from now?
 - What reasons can you give for the fact that none of the early exploration in America came from Asia eastward?
 - What changes might you expect if the Mississippi River ran from east to west?
6. *Curiosity* Exploratory behavior which could be directed toward acquiring information; the explorer thrives on novel routes or choices, uses all senses to investigate, test, inquire, and confirm.

(Use triggering techniques:)

- Are any clues given?
 - How would you feel if you knew that . . . ?
 - Formulate some questions without using the words who, what, where, when, or why.
7. *Originality*. Unusual or unanticipated response; production away from the usual or obvious; novel, unique, but relevant fabrication of clever but useful ideas.

(Challenge pupils to:)

- Think of a way or an idea that no one else will think of to
- After reading the news story, make up your own headline.

Learning Activities

Many people have equated success in providing for gifted youngsters with more lessons, harder lessons, or even the privilege to do extra activities.

This is an erroneous equation because I have found that activities not designed with a specific goal which included considerations of all the foregoing concepts and/or theories were meaningless.

The learning activities described below have been either used by me in a class of gifted disadvantaged, field tested by groups of disadvantaged, or borrowed from experience of others. Once the idea is developed, teachers can go on from there. The activities were used in a mathematics unit. We were dealing with percentage. An outline of objectives and activities is included.

Objectives:

1. Students will learn how percentage can be used to compute discount, commission, profit, and loss as shown by their ability to solve practical problems which include these elements. Students should have 100% accuracy on samples of each use of percent.
2. Students will develop an awareness of the practical uses of percentage as shown by their ability to simulate a practical situation using percentages correctly.

Isolated Objectives: (Objectives which are realized in addition to major objectives but are not crucial to the basic concept being taught.) It is important to note here that in this lesson, the isolated objectives are crucial for disadvantaged children.

1. Students will become aware of the economic pitfalls of overspending as shown by their attempts to negotiate a good buy.
2. Students will become aware of propaganda in advertisements as shown by their avoidance of expensive purchases.

Intellectual Skills to Be Stressed:

Bloom	Evaluation
&	Comprehension
Krathwohl	Synthesis
	Awareness
	Analysis
Guilford	Divergent production
	Convergent production
Piaget	Formal operations

Teaching Model: The Inductive Model which is drawn from conceptions of mental processes and general theory-building.

Scenario: The children and teacher have planned a shopping mall for the classroom. The mall has "stores" (formed with chairs and poster board) which are typical of a shopping mall - clothing store, grocery store, bank, E-Z Loan Company, employment agency, auto

dealer, realtor. Each agency had to use percent in its charges. (In order to provide situations which would allow some of the objectives to be attained, I suggested some of the inclusions while the students selected the others.)

The students have divided themselves into groups and used pictures, miniature replicas or actual articles for their stores. The bank is stocked with money (Monopoly version). The employment agency has designed questionnaires and personality tests for job seekers and listed jobs along with salaries. The bank has posted its interest rates. The E-Z Loan Company has its gimmick ad visible. All the "businesses" are colorfully decorated.

Format of Procedure: Each student must keep a record of his transactions including computations of his transactions together with computations of percentage. His income and expenditures are to be reconciled. Each person must have at the end of the experiment a minimum of three examples of instances where a transaction is made with the use of percent. The agency has to keep a record of sales. Some team members "shop" while others "tend" the agency until all have a chance to participate both as a dealer and as a customer.

Evaluation of Unit: Evaluation is based on (1) accomplishment of stated objectives, (2) incidental learnings gained, and (3) enthusiasm of students. The incidental learnings vary in different situations. In my class, the bank ran out of money and had to close. I brought in the historical reference of the Roosevelt era when banks were closed. Many children had their "possessions" taken due to lack of payment. The discoveries were numerous, and incidental teaching opportunities were unlimited. The enthusiasm was so great I had to extend the shopping mall for ten more years (five hours). Formal tests which were given to all children on that grade level showed an exceptionally clear understanding of percent and its uses.

The following is a second example that uses a theme which centers on a multidisciplinary approach to learning.

Theme: Journeys.

Subject Area: Multidisciplinary.

Grade Level: All (sophistication of planning varies with age and/or grade level).

Objectives: (General) Students will develop an awareness of the importance of journeys of all

types as shown by their participation and selection of subsequent study groups on journeys. Note: Transitional (means) objectives can be developed in each study group.

Intellectual Skills and/or Operations to Be Stressed:

Guilford	Divergent thinking Convergent thinking Classification Transforming
Bloom &	Synthesis Analysis
Krathwohl	Application
Piaget	All operations

Teaching Model: Group investigation which is a democratic process. (As I moved further into the lesson the democratic model was supplemented by the inductive model.)

Procedure: The children are asked to think about and help in listing all kinds of journeys (this activity calls for fluency in thought because the children must think further than the most commonly known journeys). A common list might be:

A journey or trip (be sure the meaning of journey is understood) to the store, to Grandma's, to another city, etc. The children are asked to think of journeys that animals might take, also, pollen, diseases, blood, clouds, birds, etc. After several lists have been developed, children are divided into groups according to interest. These journeys are researched in great detail. The units can be extended as far as is needed for each situation. An example of one group is the journey of the blood. Children can study the path of the blood, job of the heart, veins, arteries, lungs, cellular structure of blood, blood transfusion, hemophilia, etc. Models can be made, pictures, outside resource people can be used and so on.

This lesson lends itself to concept and skill attainment. Students discover a need for skills they do not now have and this is the time the basic rudiments can be taught. Caution: Teachers can easily destroy the spontaneity of the activity by becoming too involved in teaching the skill.

Evaluation: General evaluation of cognitive learnings might vary with each group. An assessment of the student's awareness of journeys can be evident in his selection of groups.

A unit on colors can be pursued in much the same way as those described above.

Initiating Question: What would we miss in the world if everything was either black or white in appearance?

As I mentioned earlier, Mary Meeker has developed activities which could be used by teachers to develop various areas of the intellect. For the gifted disadvantaged, the area of semantics might be weak. Exercises which would develop a child's ability to make choices among relationships are as follows:

1. Use a game of classifying objects. Prepare cards or write on the board for classes of things, i.e., metal, plant, animal. Children can pull words or smaller cards from a bag and match the word with the class.
2. Use analogies in class. Begin with simple ones like - when it is cold and snowing, mittens are to hands as what are to feet? Children can then make up analogies which can be related in similar endings, length of words, etc.

One can go on and on in this vein. In a unit on careers, I provided a list of job titles along with a description of each. Children selected a title in their interest area and performed the job as a service to the class. Some of the jobs were as follows:

1. Cartographer. Map drawing and study of maps. Reports were given to the class on how these are drawn. For disadvantaged children, motivation would come through adventure stories of seafaring men who needed to read maps to find new lands, spacemen who charted maps for outer space, the necessity for map reading skills when we travel from one city to the other.
2. Lexicographer. Students who selected this task developed new words for the class, researched origins of words, and made a class dictionary following the guidelines of the regular dictionary. Self concept can be developed through encouraging a search for meanings or origins of some well known or frequently used slangs and/or dialects.
3. Philatelist. Students collected stamps or pictures of stamps and discussed their meanings. These students also collected picture post cards from various towns and countries.
4. Historian. These children selected the city, region or country of their choice and developed details for historical reference.

Independent study is a popular method of providing opportunities for primary and middle school children to forge ahead. Some projects completed by talented students are fascinating. Students

have delved into the workings of tornadoes replete with wind tunnel apparatus. They have compiled histories of the scientific development of household appliances and charted the migration of birds. Still others have made studies of communication systems of animals.

Astronomy holds a special fascination, it seems, and budding Galileos have built their own telescopes, investigated optical illusions, and built demonstration models of eclipses. Work around planetariums has been afforded gifted youngsters to their benefit.

Young mathematicians have plotted historical progressions of size and speed of modern vehicles, studied school costs and sources of income, and completed demographic studies from census data. Some have delved into the secrets of the stock market. A few with extraordinary derring-do have looked into concepts of probability and number theory. A favorite pastime is gnawing at the carcasses of famous historical problems and paradoxes.

Language arts devotees have studied advertising for key phrases and psychological impact, written alternative endings to stories, and studied the impact of the life and times of authors on their output of literature during the period involved. Studies of mythology are popular with the young wordsmiths as are Great Book Clubs and sheer output of poems, stories, essays, and other creative offerings.

Young social scientists have studied holidays and noted original sources, studied women who shaped historical events, and traced the paths of food items from planting and harvest to the table. Historical and contemporary juxtaposition of forms of societal organization and control are popular as are cultural and psychological studies of winners and losers in bids for high office. As expected, ecological studies rank high because of current emphasis, and the wedding of natural and social science becomes more complete here than at any point as youngsters seek to conceptualize a science that serves and not rules. The performing arts are well represented in programs for gifted children. Musicians with unusual talent find a chair in local college orchestras and small groups. Athletes are perhaps the most sought-after group. Summer camps, informal pick-up games, and observation of practice sessions conducted at the college develop skills and insights. Local children with dramatics ability find a role in college productions requiring children and youth. Modern dance and ballet groups are springing up.

It can safely be said that there are as many program characteristics as there are programs. Divergent thinking is the order of the day as ima-

ginations of excellent minds soar in the consideration of the possible.

Finally, a simulation game on ecology can result in high interest and effective learning. It begins by having students write to the Department of Interior for information on the latest legislative proposals and acts by Congress.

Simulation Game

*Pass the Eco-Bill**

- | | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Objectives for students | To develop the ability to articulate cause and effect of bills being passed; to develop the ability to think on their feet; to develop divergent thinking and fluency of ideas; to develop an awareness of the interrelation of politics with our study of ecology. |
| Physical format | Classroom set with seats for "senators" facing the "legislative body."
Bills written out to be read to the class. |
| Game moment | The game begins when the chairman calls the legislative body together and raps for order. |
| Aim | The aim is to pass a bill for ecology by receiving the highest number of votes from the legislative body. |
| Players | Two teams of 2 or 3 persons each and the legislative body which is made up of those not on the two teams. |
| Procedure | The teams will select a color (red or blue). The starting team is determined by the color of paper drawn from the hat or box by someone other than the team members. Bills to be presented are selected by the members from the groups of bills which were made up by the class. Each team has had time to study the bills and discuss their strategy. Each team member is given a list of the bills to be presented in order to strengthen the opposition or to insure its passage. A bill is presented by the starting team with five minutes allowed for presentation. Presentations should include what persons are affected financially and also how this bill affects |

**This lesson on political science and the accompanying game Pass the Eco-Bill are part of a copyrighted document. As author of the papers, I give permission for its use under noncommercial circumstances with proper credit: Baldwin, Alexinia. Ecology, the Web of Life. A Process Oriented Curriculum for High Potential Students. Copyright 1971.*

the environment. The opposing team must challenge the bill on all points. This exchange period should not go more than 10 minutes with the exchange going back and forth between the teams. Each team is given points 1-5 for its defense of the bill it is presenting. A total score of 3 times the members of the body, or more, means that a bill has passed. The next team presents its bill and so on until time is called on the game. Each team must have an equal number of times up before a winner can be declared. The winners will be the team with the largest number of bills passed.

Recapitulation

The basic thrust of programs for gifted disadvantaged children is the same as the thrust of programs for gifted advantaged children. Resources of school and community are applied as effectively as possible in the service of clear goals of developing children's talents as fully and as effectively as possible. Programs of experiences are organized. Creative teaching strategies are employed. Minds are encouraged to expand. Unusual talents are not left under the bushel.

Special attention and techniques in this context enable gifted disadvantaged potential to flower. Tests of creativity replace the linearity of IQ and achievement measures. The cultural milieu is studied carefully to make the simulations and experiences meaningful. Community resources and individuals are mined more vigorously to assure both relevance and role models. Career education is pressed into service.

Teaching strategies for both the gifted advantaged and disadvantaged assume a high priority. A huge panoply of intellectual functions must be available in a context of developmental maturation. Systematic programming of needed mind-bending experiences, both formal and informal, is truly an art with teachers of gifted children. Clear taxonomies a la Guilford and Piaget and clever programming have a priority here. In the performing arts the challenge of models and the influence of masters hold sway. In science and the humanities, teachers who are able to actively explore with the children are important.

When I worked with gifted disadvantaged children in the classroom, I said to myself each day as I observed those active, inquiring youngsters, "I have here the potential discoverer of a cure for cancer, designer of a world peace strategy, discoverer of great sources for energy, national leader

politically and socially; therefore, I must provide the atmosphere and give the direction which will cause a 'quart' to give its full measure." So I find myself reflecting on these lines from Thomas Gray's (1868) *Elegy Written in the Country Churchyard*:

"Full many a gem of purest ray serene,
The dark unfathomed caves of ocean bear;
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air."

(p. 170)

Hopefully, the future will see a more thorough development of talents of gifted disadvantaged children. It is morally imperative to do so and our country will surely benefit in many ways.

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Starting a Gifted Program

Bruce O. Boston

THE fact that you (singular or plural) are interested in starting a program for gifted and talented youngsters in your school or school district already contains the kernel of your first problem: There *isn't* one and there must be reasons for that fact.

- Perhaps there are no gifted children. This is unlikely since on the national average between 3% and 5% of all school children are gifted and/or talented. More likely is that they have not been identified as such.
- Perhaps no one has thought of it before. In this case this particular problem is solved because you have. The issue now becomes one of information, resources, planning and advocacy.
- Perhaps someone has thought of it before but there were other obstacles, like motivation, lack of organization, lack of funding resources, lack of trained teachers, or a host of others. Here you are to be congratulated because the first major hurdle has already been crossed. You have moved from the realm of a Given which sets the terms for the present into the area of Problems which are potentially solvable in the future. You have moved from the Already to the Not Yet, and that is a big move.

To initiate a gifted program the following factors must be present. They constitute the field in which you will move from the moment you decide you would like to get a program going until the moment the first gifted student enters the classroom. Attention has to be paid to them initially and throughout the process of program building. They will not be decided once and for all but will be continually revised as you go along. The remainder of this brief article, therefore, will be spent in working on practical steps to achieve your goal.

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Getting Your Head Together

Starting a gifted program may be compared to the story of the old Vermont farmer who was asked directions by the city slicker. The question having been put, the farmer paused, scratched his head, and then replied, "Well, young fellow, if I was going there, I wouldn't start from here." And this is exactly the point. To start a gifted program you have to begin not from where you are, but from where you want to be; then work your way back by integrating your ideals with the nitty gritty of the existent situation. The end precedes the beginning. To put it differently, goals should determine strategies and tactics; strategies and tactics available should never limit goals.

Goals

A program for gifted and talented youngsters is, in the final analysis, a process which is designed to serve the needs of these children in the concrete realities of organizational nuts and bolts, flesh and blood personnel, and tangible environments. But before all of that becomes a reality goals have to be decided upon. These questions have to be answered for goals to be clear:

- What do you want to accomplish over the long haul?
- Why do you want to accomplish *this* and not *that*?
- What is the desired end state of a gifted program in terms of what happens to kids?

Some important goals for a program for gifted and talented children would include the following:

1. To provide a learning environment which is particularly suited to the needs of a gifted child, most especially in the areas of creativity, decision making, reasoning, communication skills, and a given child's unique talents.
2. To provide opportunities for the student to enhance, develop, and use his or her initiative, self motivation, and originality.

3. To engender in the student a sense of responsibility for setting his or her own goals according to interest and ability.
4. To assist the student in the development of cognitive, affective, motor, and valuing skills.
5. To provide activities which incorporate multimedia and multidisciplinary approaches.
6. To provide the context in which the student can develop productive relationships with peers, extend the horizons of personal experience, gain a sense of taking personal responsibility and extending freedom of choice.

Objectives

Once your goals are firmly established (because they have been thought through and can therefore be defended against all challengers—and there will be plenty of them), it is time to start thinking about objectives. Although we often confuse goals and objectives, they are not the same thing. Goals describe a desired end state; an objective is what we have to accomplish in order to achieve the goal. If the goal is the far bank of the stream, then the objectives are the stepping stones. The questions here are:

- What do I need to do in order to achieve the goal?
- In what order should these things be done?
- Must they be done?
- How appropriate to the goal are the objectives?

Objectives for a gifted program will include at least the following:

1. To develop a framework for identifying gifted and talented children, with appropriate instruments.
2. To form an information base accessible to parents, teachers, administrators, and involved community leaders in regard to other programs, curricula, and resources.
3. To make provision for staff development and training for teachers, paraprofessionals, and teacher aides through workshops, seminars, and other forms of inservice training.
4. To involve the community in extra-school activities for gifted and talented students among professional, business, and cultural sectors.

Strategies and Tactics

Once goals and objectives are clear, strategies and tactics become the next item of business. This is the "how to" part. Strategies and tactics are the levers applied to the given situation to move existing conditions toward desired end states.

A helpful skill in the development of strategic

competencies is the ability to use problem solving techniques such as force field analysis, fantasizing, synectics, envisioning processes, and the like. These techniques can be extremely useful in isolating key points for applying leverage so that wasted effort is minimized and work accomplished is maximized. In trying to initiate a gifted program in a school system, it is well to keep in mind that you are dealing with an institutional framework which has political, economic, bureaucratic, and psychic aspects, each of which has its own rationale and logic. You will need to gain a sense of how this all fits together if you are going to effect change in it. You will have to understand the "threat level index" of people you are dealing with (and your own!) and what constitutes an acceptable and/or an effective "trade-off" when needs are in competition. In short, learn how to sail as close to the wind as possible without either luffing or losing your momentum. As in sailing the learning comes in the doing—getting the feel of the wind, the sail, and the tiller.

OK. You have some clarity now about goals, objectives, strategies, and tactics. Recognizing that these will be revised, altered, or sometimes completely changed in the process of getting a program off the ground, the question of values needs some attention.

Values

There is a tendency among all of us to (want to) think that education is a relatively value free process, i.e., that it consists mostly of the transmission of information which is somehow "neutral" until applied. But a moment's reflection reveals that this is not the case. Education is a process of changes in which the transactions between teacher and pupil, among pupils, and between all of them and the subject matter are all value laden, because these transactions move persons in particular directions. The question is not whether we educate for values but toward which values we educate. The point to be made here is simply that anyone wanting to initiate a program for the gifted must be highly self conscious about the values the program communicates and highly aware that this is a matter of choice and not to be left to chance.

A further aspect of thinking a gifted program through is the whole matter of timing. As in most cases the Greeks had a word for it, *kairos*; the right time for the right thing to happen. Too often the best laid plans of mice, men, and those concerned with gifted education go awry because a timing sequence for events and initiatives has not been established or has not been followed. Perhaps the most common error made is trying to get commit-

meets from decision makers before all the homework has been done by those seeking the commitment. You will have to know when important meetings are being held, schedules for submitting proposals, how long it is likely to take to accomplish particular objectives, and when important elements of the program you are proposing can be fitted together. All of this requires not only a sense of timing but also some political acumen. If you lack this sense in yourself, ally yourself with someone who has it. You will not regret it.

Information and Resources

Finally, getting your head together requires a mastery of information and resources. Read and study everything you can get your hands on related to gifted education. Find out who in your area has had experience teaching gifted children and seek these people out. Find descriptions of gifted programs that are in existence elsewhere and study them for ideas that can be translated into your situation and which fit into the goals you already have. Learn the characteristics of gifted children. Become familiar with identification procedures. Once the process gets rolling and you are up to your ears in meetings, conferences, and phone calls you (a) will not have the time for it and (b) will need to have the information at your command to do what you want to do anyway. Take a tip from scouting: Be prepared.

The following organizations and/or persons are resources to which you may want to refer for information, in addition to the brief bibliography provided in this publication:

Office of Gifted and Talented, USOE
Room 2100
7th and "D" Streets, S.W.
Washington, D. C. 20202
(202) 245-2482

ERIC Clearinghouse on Handicapped and
Gifted Children
1920 Association Drive
Reston, Virginia 22091
(703) 620-3660

National/State Leadership Training Institute on
the Gifted and Talented
316 West Second Street PH-C
Los Angeles, California 90012
(213) 489-7470

American Association for Gifted Children
15 Gramercy Park
New York, New York 10003
(212) 478-4266

The Association for the Gifted (TAG)
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
(703) 620-3660

A listing of state level groups of parents of gifted children as well as a listing of state education agency coordinators of gifted and talented programs are available from the ERIC Clearinghouse, 1920 Association Drive, Reston, Virginia 22091.

Getting People Together

A gifted program is for gifted children. It is not for their parents, their teachers, or local school administrators, but for them. They are not the objects of the program but its subjects. A good question to ask continually is, "What does this (goal, strategy, objective, value, etc.) have to do with these children?"

Identifying the Gifted

This first group of people on the agenda, therefore, immediately raises the issue of identification. There is probably no more widely discussed problem in the whole field of gifted education than what we mean by *gifted*. A sampling of some state laws relating to gifted education reveals the following definitions:

Arizona (1971): "Gifted child" means a child of lawful school age who, due to superior intellect, advanced learning ability, or both, is not afforded an opportunity for otherwise attainable progress and development in classroom instruction and who needs special instruction . . . to achieve the levels commensurate with his intellect and ability.

Georgia (1964): . . . children who have manifested exceptional abilities, unique potentials or who have made exceptional academic achievements.

Illinois (1965): Children whose mental development is accelerated beyond the average to the extent that they need and can profit from specially planned educational services.

The search for a really good (read: universal) definition of *gifted* goes on, but in the interim perhaps we are best served by the one which appeared in *Education of the Gifted and Talented: Report to the Congress of the United States by the US Commissioner of Education* (1971):

Gifted and talented children are those identified by professionally qualified persons, who by virtue of outstanding abilities are capable of high performance. These are children who

Table 1
Methods of Identifying the Gifted

Method	Advantage	Drawback
Teacher nomination	Closeness to the child. Familiarity with characteristics of gifted. Opportunity for comparison.	May miss underachievers, culturally deprived, motivational problems, belligerent and/or apathetic children. Should be used in combination.
Individual intelligence test	Best but costly in professional time and services. Broader sampling of abilities possible. Control of testing environment. Interpretation of <i>quality</i> of performance possible.	Impractical where funds are limited. Possibilities of cultural bias.
Group intelligence test	Good as screening device. More likely to hit the majority.	Penalizes poor readers. Pupils need near perfect score to qualify as gifted. Don't use as final measure. May misidentify underachievers and culturally deprived.
Parent nomination	Closeness of contact and more complete information base to judge from.	Parents can both underplay and overestimate child's accomplishments.
Peer nomination, self nomination	"It takes one to know one."	Many gifted children conceal their abilities.

require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual and performing arts
6. psychomotor ability.

That covers a lot of territory, which is as it should be, since for too long *gifted* has meant "cognitive super star," a much too narrow definition. A gifted program that means anything, therefore, will have to take into account a broader spectrum of abilities than mere brain power, and means to identify accurately other forms of giftedness need to be developed.

There are several different instrumentalities available for identifying the gifted, each with its own advantages and drawbacks. Some of these are summarized in Table 1.

An important element in the identification of the gifted and talented is the checklist of characteristics of giftedness. There is no standardized list.

In fact, as one may imagine, there are nearly as many lists as there are writers and researchers on the topic. A fairly widely used behavioral rating scale is the one devised by Renzulli and Hartman in which the lists are divided into categories which include learning, motivational, creativity, and leadership characteristics.* Ruth Martinson suggests that identification is a process of a series of steps: *screening* through the use of multiple methods, *actual identification*, and evaluation by means of *case study* of students identified as a check on procedures.

Those interested in initiating gifted programs will need to take considerable thought as to the procedures they will want to use. Remember, however, that no one identification procedure is sufficient. Some combination of various forms of identification is likely to yield better results. Do not neglect to use the services of a school psychologist and/or guidance counselor.

*The Renzulli-Hartman Scale, as well as a number of other lists of characteristics of gifted children, is available in the excellent treatment of all the issues associated with identification, *The Identification of the Gifted and Talented* by Ruth Martinson. This document is available for \$6.05 from the National State Leadership Training Institute, 316 West Second Street, PH-C, Los Angeles, California 90012.

Parents

The second group of people with whom you will be dealing is the parents. Parents contribute to the education of their children in both formal and informal ways and many of the best communication techniques used by teachers can also be used by parents. But the clue to parent involvement in the education of their own gifted children is the child's own interests and abilities. The last thing a gifted child needs is a "pushy parent." Perhaps the best contribution a parent can provide is space for the child first of all to be a child. The important thing for any parent to realize is that a "genius in residence" is not a reason to push the panic button. Indeed, the very fact that the giftedness of the child is in some respects hereditary means that parents probably possess both the imagination and intellect to provide good educational experiences; the rest is simply a matter of resources.

The following statement by a parent of a gifted child deserves reading and contemplation:

I think my basic philosophy about gifted education can be stated very simply from a parent's standpoint. The most cruel thing you can do to a gifted child is to put him in a chair and force him to learn something he already knows. Anything that solves that problem, to me, would be the most important thing. Tests are often inadequate, but if students' knowledge of the subject could be tested, and if the test results demonstrated that the students had already learned the material, they should be given an elective in that field or some other, or be given released time for learning—musical instrument, art work, or whatever the child's driving interest is at the time. These children feel such a time bind! Time is such an enemy to them; there's never enough of it to do what they want to do. And if they feel they are wasting time, they very much rebel against it. If they are ready for algebra or geometry, they shouldn't have to take seventh grade math just because they've never had a class in it.*

Beyond what the parent can do for the child in the home environment, however, is what parents

can do together both to initiate and sustain gifted programs in the school systems where they live. Nothing guarantees the success of school programs for the gifted as much as the existence of a well organized and active parent association. Parent groups can meet with boards of education to provide evidence of the need for programs and for their extension. They can initiate action, request presentation of provisions for existing programs, and thus generate evaluation by professional educators. To suggest that parents think of themselves as "squeaky wheels" is not farfetched. One might safely predict that "right to education" legislation in many states will draw the attention of parent groups who are interested in educational provisions which are commensurate with their children's needs.

Parents can also contribute in many ways to inservice education for teachers and principals by arranging and sponsoring meetings, demonstration classes, panels on gifted education, and by providing recognition of outstanding teachers. They can assist in the classroom as teacher aides, provide transportation for field trips, make contacts in the community for new experiences for the children, even share their own expertise in the arts, crafts, hobbies, and so forth. Parent associations also provide an antidote for loneliness, a loneliness which is not unlike the loneliness of the gifted child who sometimes has trouble finding satisfying peer relationships. The parents of the gifted child can learn that their problems are not unique, be reassured, and share ideas which can be put into action. In sharing information about their own child's growth and accomplishments, parents can learn a new perspective on their own children and on their own role as parents.

If there is no parent association in your area, one of the first steps toward establishing a gifted program may well be the drawing together of several parents who would be willing to cooperate in establishing such a group as a means toward organizing for such a program. An excellent resource for such groups is *The Gifted and Talented: A Handbook for Parents* by Jeanne L. Delp and Ruth Martinson, available from the National/State Leadership Training Institute on the Gifted and Talented for \$3.45. Further assistance is available for parents from the Gifted Child Society of New Jersey, 59 Glen Gray Road, Oakland, New Jersey 07436, as well as from the listing of parent groups available from the ERIC Clearinghouse on Handicapped and Gifted Children. The upshot is that parents are an important resource for getting a program started. Find them and use them.

*Excerpted from *The Gifted Student: A Parent's View* by Anna Jean Skinner. Ms. Skinner is on the staff of the Office of Gifted and Talented, US Office of Education, and is the mother of a gifted son and daughter.

Teachers

As is the case with defining what makes a gifted child, there are a variety of opinions on what makes a good teacher of the gifted. We are thrown right back on the problem of identification. Some of the most often listed characteristics would include the following:

- Highly intelligent.
- Flexible and creative.
- Self confident.
- Has a wide variety of interests.
- Sense of humor.
- Fairness, firmness, patience.
- Sympathy for problems of the gifted.
- A clear self understanding.
- Enthusiasm for teaching.
- Willingness to be a "learning facilitator" rather than a "director of learning."
- Loves learning.
- Not "uptight" or defensive.

Some researchers and experts argue that teachers of the gifted should themselves be gifted, and most agree that a high level of intelligence is a prerequisite. Communication skills are also stressed, as is emotional maturity. But for purposes of getting a program started the two most important qualifications are interest in the educational problems of gifted children and the motivation which will produce efforts in their behalf.

Who are the teachers who are known to be willing to take extra time with their students, who exercise initiative in providing unusual educational experiences, whose classes are always doing "interesting" things, who are willing and able to move outside the curriculum when the occasion demands, who are trying to improve their skills as teachers? In short, which teachers are *involved* in what they're doing? These are the teachers you and your group will want to be in contact with, both as resources and as potential allies.

Administrators

Principals and/or local administrators can also be of enormous help. Too often they are looked upon as the enemy, largely because they are the people who have to be convinced in order to get a gifted program into a school system where none has existed before, or perhaps where one was in existence and failed. True, the administrative hierarchy of a school system ranges from the enthusiastic to the intractable when it comes to responding to initiatives that mean change in the system. These people will have to be sounded out, but the

important thing to remember when discussion gets under way is that you will stand a much better chance of being convincing if you have done the homework required to make a cogent case for the gifted. Principals, school board members, and superintendents will want to have answers to the following questions:

1. Why do we need this program?
2. Why do we need this program now?
3. What does this program offer that is not already being provided by existing programs?
4. How will this program fit into the rest of the instructional system?
5. How will present teaching schedules be affected?
6. Are we talking about a one shot deal, or something that has staying power?
7. HOW MUCH WILL IT COST?
8. Who is going to pay for it?
9. Who is behind it and what are their reasons for favoring it?
10. "But" And here will follow a host of objections which will need to be anticipated as much as possible but, which if not, are at least answerable.

Community Support

Finally, getting people together means community support. All too often the educational process has meant the extraction of children from the natural environment in which they live and placing them in the artificial environment of the school. But if education truly means "leading out," it will have to mean leading children (and in this case gifted children) out into the world in which all of us function.

One important factor about using community resources for a gifted program is that it can serve as part of the answer to lack of funds for special resources and equipment. Those who wish to organize an educational program for the gifted will do well to assure that specific goals and objectives are well defined before approaching the private sector for assistance. But citizen groups, local service organizations, business, industry, foundations, professional associations, and volunteer organizations of all kinds can be a real asset to a gifted program once they are brought on board and can identify with a program's goals.

Beyond organizations and associations, in every town, large and small, there are individuals who can benefit gifted education and gifted children. There are artists, musicians, dancers, actors, lawyers, judges, clergy, potters, weavers, carvers, poets, engineers, chemists, politicians, civil

servants, librarians, nutritionists, doctors, and a host of others. Community institutions can also provide special resources for field trips, exploratory study, and projects. There are colleges, churches, museums, trade and vocational schools, libraries, orchestras, theaters, stamp and photography clubs, and special interest groups almost ad infinitum.

The presence of these persons and groups in a community does not mean that their support must be enrolled to insure the success of a gifted program. But their presence does mean that they are potential resources both for organizing the program itself and for sustaining it once it has begun. What is often overlooked is that the people who are involved in the arts, sciences, humanities, business, industry, and the professions in a given community are themselves gifted in terms of accumulated experience, and that they have a natural interest in sharing with interested young people what they know, their skills, and their vision of the future. That they are not more widely used to augment and supplement an educational program which they themselves support with their tax dollars is a dreadful waste. These resources are limited only by the imagination of those who are interested in gifted education.

These then constitute the *human environment* of the gifted program you want to start: gifted children, teachers, parents, administrators, and the resources of the community as calculated in terms of the people who make it a community. Any organizing committee which seeks to begin a gifted program should include representation from all of these elements insofar as that is possible, not only for the sake of diversity of input, but also to foster broad based ownership in the program's goals and objectives from the beginning.

Organizing: The Marriage of People and Goals

There is no one way to organize anything. Different goals, strategies, and objectives will call for different modes of organization and different procedures. Different local contexts will call forth different structural arrangements. To organize a commune hierarchically in this day and age would be a mistake, and the reverse side of the organizational coin is the famous sign on President Truman's desk: "The buck stops here." The upshot is simply that you have to organize to meet your needs. The following suggestions may prove helpful in the organizational task:

1. Form a committee of persons who have a vested interest in a gifted program. This will most likely include all the people discussed in the preceding section.

2. Seek and foster heterogeneity as a hedge against both elitism and an attack from the blind side.
3. Develop an overall plan which includes a time line.
4. Match the interests and abilities of persons with tasks to be performed, i.e., with goals, objectives, strategies, and tactics, and not with roles (chairman, vice chairman, etc.).
5. Every task carries with it two burdens: the responsibility for execution and the oversight responsibility for seeing to it that the task gets done. Sometimes these are vested in the same person, sometimes not. Be clear. Authority can be delegated; responsibility cannot. Someone has to be in charge.
6. Internal communication should be full and open. The "need to know" criterion has little or no place here.
7. Build a component of continual review and evaluation into your plan.
8. *Power.* Face it. Starting a gifted program requires changing the status quo. Concentrate energy, find a lever and a fulcrum, and lean. There are many sources of power—in persons, in information, in the ability to form and direct opinion and the energy of others, in the ability to deliver what someone else wants or needs, and in the ability to make advantageous trade offs, i.e. turning a "win-lose" situation into a "win-win" situation. The organizational component does not mean power grubbing, but it does mean taking the power issue seriously and unapologetically.
9. The following components should be a part of your organizational structure:
 - a. Overall policy and planning.
 - b. Internal and external communication.
 - c. Community relations.
 - d. Parent and teacher support.
 - e. Information on gifted education.
 - f. Identification procedures.
 - g. Curriculum.
 - h. Evaluation.
- Task forces can be organized around these functions.
10. There is always an alternative. If one does not appear, it is probably because you are asking the wrong question, or because you are asking the right question to the wrong person.

The whole point of organization is getting the right person to do the right thing at the right time

so that the goal is accomplished. The two most dangerous enemies of good organization are redundancy of effort and biting off more than you can chew at one time (for purposes of this article, com-

petence is assumed, but don't you assume it!). Once you have your organization in hand, have clarity of goals, motivation, and a little imagination, there is little you cannot accomplish.

A Conversation with Jim Gallagher

Elizabeth Neuman

THE record time for being interested in the education of the gifted and talented without having heard the name of Jim Gallagher is probably in the neighborhood of five minutes. Since taking his PhD at Pennsylvania State University, his professional career has spanned duties as a clinical psychologist and Director of Psychological Services at the Dayton Hospital for Disturbed Children; Associate Director of the Institute for Research on Exceptional Children at the University of Illinois; Chief of the Bureau of Education for the Handicapped, USOE; and Deputy Assistant Secretary for Planning, Research, and Evaluation, USOE. He is a past president of The Council for Exceptional Children and currently serves as director of the Frank Porter Graham Child Development Center and Kenan Professor of Education at the University of North Carolina, Chapel Hill.

His publications have included studies on the thinking, attitudes, and social adjustment of gifted children, the education of the disadvantaged gifted, intelligence measurement, teaching brain damaged and retarded children, and other topics. His most recent book, *Teaching the Gifted Child*, was published in a second edition, by Allyn and Bacon this spring.

But Jim Gallagher is more than an amalgamation of degrees, positions, and publications. His leadership, often unconventional wisdom, and foresight in the movement to educate our nation's gifted and talented have been graced by a ferocity, gentleness, productivity, and humor that betray his Irish heritage. It should come as no surprise, then, that the conversation presented here between him and Dublin-born Elizabeth Neuman, should seem unusually lively and worthy of a wider audience. Triggered by her questions, Dr. Gallagher ranges across some of the lessons learned from the past and places that experience in the context of what it means to be involved in processes of systemic change. Along the way he gives his own thought provoking definition of *gifted*, talks about *change agents* (he is dubious), and offers some practical reflections on how to get things done.

Elizabeth Neuman is currently finishing a PhD in the education of the gifted at Teachers College, Columbia University, while serving as an administrative intern in the USOE Office of Gifted and Talented. She has been involved in the education of the gifted and talented in her native Ireland as well as in this country, where she has worked for the West Hartford, Connecticut School District, and the ERIC Clearinghouse on Handicapped and Gifted Children. This interview is a transcription of a conversation originally taped for educational television. We hope you enjoy listening in.

A Conversation with Jim Gallagher

Ms. Neuman: Dr. Gallagher has been much involved in gifted and talented education and has had very wide experience in the field of education generally. Most people in the field of education will be very familiar with the important contributions he has made to this field in his several books and articles. Dr. Gallagher, I wonder if I could talk to you about your work in the field of gifted and talented and ask you about your work in the field as a "facilitator."

Dr. Gallagher: Surely. I know that we decided not to use the term *change agent*, so I thought it might be worthwhile to say something about why. To me, *change agent* means or has the connotation of being a manipulator—of going in and changing people whether they want to be changed or not. It seems to me there is a role to be played by a *facilitator*—someone who can articulate the needs of people and who knows how decision making mechanisms work, whether it's the mechanism of a school board or a legislature or what.

Ms. Neuman: I am very interested in this particular area and I was wondering how long you have been working in this field and what got you interested. Could you tell us a little bit about that, especially for people who haven't been in this field?

Dr. Gallagher: Yes, a long time is the answer to your first question. Actually, I got involved directly

back in 1954 in Illinois when I started a research project on the adjustment of highly gifted children in the elementary classroom. These were youngsters who from an IQ test score were about one in a hundred thousand in the population, and we wanted to find out what kinds of problems they were having and what the school was doing to try and help them. From that I got involved in the Illinois program. About three years after that there was an attempt to get some legislation in the state on the gifted. The School Problems Commission held hearings and they got all sorts of interested citizens to come in and express their interest in the problem. Out of the hearings came some special pilot studies that were done around the state. Out of the pilot studies of three or four years, a full-fledged legislative plan was developed which the State of Illinois accepted, and I was involved in most of those steps. I think it is crucial to understand that that is probably a good way for any program for the gifted to get started—very slowly and very quietly. There needs to be a variety of program elements that you can put into the field so that people can see what can be done in this area. Only then can you generate some large package of support, because this is not an area that generates instant support. People like to think about it and get used to it for a while before they say "Yes, that's a good idea."

Ms. Neuman: We were just talking about highly gifted children. Is there a difference between highly gifted and gifted? What kinds of children are we talking about?

Dr. Gallagher: Well, everybody thinks it is easy to define groups of youngsters like this and it really isn't. My own definition is that gifted youngsters are those who have learned to use the symbol systems we have in our society at a much higher and more effective rate than other youngsters of the same age. That means they use language more effectively. It could mean they use mathematical symbol language more effectively. It could mean they are extremely talented in using the symbolism of drama or art more effectively.

Ms. Neuman: So in effect we are talking about high conceptualization.

Dr. Gallagher: High conceptualization, but not just with words. Certainly we are not talking about those youngsters who have rather narrow talents such as the Ping-Pong player or the good crocheter or some such thing as that.

Ms. Neuman: Because of the obvious difficulty of measuring it.

Dr. Gallagher: Not only that, but some talents are not, on a high level of concept development. Sometimes we get confused when we say there's a wide variety of talents that we want to include, which is right, but you don't want to include all kinds of talent. Only those that use these conceptual symbols at a very high and effective rate, that really outstrip the capabilities of the schools to deal with them, ought to be included. Not that the schools are doing a bad job. It's that there are certain youngsters the ordinary school system just can't do a good job with unless there is some special program.

Ms. Neuman: May we probe a little bit more into your historical background?

Dr. Gallagher: A little bit.

Ms. Neuman: I'd like to talk about your book, *Teaching the Gifted Child*. I was wondering how you came to write this book and what motivated you. Was there a particular interest at this time (in the 1960's) in the gifted?

Dr. Gallagher: Yes. The book hit at the flood of the post-Sputnik era when there was a tremendous excitement in the area of the gifted that was generated first of all by our concern about our status vis-a-vis the Russians, and secondly by the money that came through the National Science Foundation, the new curriculum effort. The National Defense Education Act had training opportunities for people in this area and there was a tremendous ferment. Out of that and out of the research that I had done there was an opportunity to pull a lot of things together—a lot of ideas about special curriculum and special areas of creativity and productive thinking. That's what stimulated the book and I was fortunate enough to be at the University of Illinois where a great many of those kinds of things were going on, so I could talk from firsthand experience about it.

Ms. Neuman: I know that your wisdom stretched right across the Atlantic because I made extensive use in Ireland of your research bibliography which was published later on and which was extremely helpful. Would you say at this point, then, that the interest in gifted and talented in the 1960's was a natural development rather than artificially induced?

Dr. Gallagher: Well, I think in part it really was artificially induced. A lot of good causes are artificially induced, I guess, but this was certainly based upon fear rather than upon rational or careful planning. It was a kind of "Good Lord, all of a sudden these fellows are ahead of us and they may have bad intent toward us and how do we

protect ourselves?" So we threw lots of money into the sciences and into mathematics in an attempt to try and get a crash program to catch up. It is probably a great lesson on how our own decision making apparatus works to get things done at the national level.

I was in Washington for three years, and one of the lessons I learned was that it is a crisis oriented town. Because you have power disbursed over so many different places, so many different people, in order to get anything done you have to have some kind of an alliance of all those power sources. One of the best ways you can get an alliance is to scare the wits out of people. Then all the people who are afraid will get together and do something. That seemed to be the basis for the actions that took place at that time. State legislators picked it up too. That's one of the reasons why Illinois jumped into the legislative area at the full flood of that sputnik thing and a lot of other states did the same thing.

What we're trying to do now (and I think this is a much healthier way to go about it) is to try and plan on a rational, systematic basis what needs to be done, so that it isn't just a kind of peak experience which then falls back when some other crisis comes along. That's what really happened, you know. In 1965 or thereabouts, the American school system became almost totally involved with the issues of the disadvantaged child, with desegregation, and with busing. For the last decade or so there really hasn't been a great systematic effort to work with talented and gifted youngsters, and we have just started to come out of that situation. If we have to depend on creating another false crisis, I don't think we can count on any kind of staying power. I think we have to develop a quite different way of getting the job done.

Ms. Neuman: That was going to be my next question to you. I wanted to ask you to talk a little bit about focusing on gifted and talented education and how it has been possible to bring about a situation which would train "facilitators" in the education of gifted and talented at all levels—federal, state, and local. I wonder if you would comment in general about the training aspect.

Dr. Gallagher: I think you first have to ask what the job is that has to be done. What is a facilitator and what will a facilitator do? Then you can find out how you would train somebody to do it. I think that facilitators can be useful to the extent that they first are able to understand the feelings and needs of the people in the area that they're dealing with. They must empathize with these people whether they agree with all of them or not. They

must at least understand them. Second, they must understand the system that they are trying to have an impact on and help the people who have needs but don't know how to get them satisfied. That's a very different attitude from saying, "I have a secret plan that I'm going to implement because I have some special techniques that I can use to work my way around people." In this area, when you say "Why don't we do something for gifted children?" and "I've got a plan," you find that you are articulating what lots of other people have felt but haven't said. And when you say that, you get people saying "Yes, that's right, we certainly ought to do something in this area. I've thought about that myself from time to time as to why we don't pay more attention in this area." What you're doing is not twisting people's feelings in this direction. What you're really doing is expressing what they've felt in the first place, perhaps for the first time. Then the trick is to get a legislature, school board, or citizens' group interested in this enough so that certain kinds of actions are taken. The question is how do you train somebody to do that?

Ms. Neuman: Well, perhaps we can talk about that later. While we're at this point, let's talk about how you can get something done in the area of the gifted and talented at the federal level.

Dr. Gallagher: As you know, there has been an amendment passed to the new Elementary and Secondary Education Act. I think that section actually goes back about six years to earlier legislation that called for a report to the Congress. How that got started was that certain Congressmen became quite interested in gifted education and they wanted to do something for these children. But it came at a time when, if that something cost money (even if it were 10 cents) it wouldn't get passed. The Congressmen, wise in the ways of their own organization, instead called, on a kind of resolution basis, for a study and analysis of what the Office of Education was doing about this and of how existing legislation was helping the gifted. Fortunately, there was a Commissioner of Education at that time named Sid Marland who was terribly interested in the topic and seized upon this as an opportunity to get something done. They held hearings in 12 cities around the country and asked for citizen participation and opinion. What they got was a wide range in opinion and great support for trying to do something. And that strengthened the hand of the Congressmen who were interested. Then they could go back and introduce legislation that was modest in scope and yet still allowed them to express their feeling that

something meaningful needed to happen in this area.

Ms. Neuman: These things don't happen overnight.

Dr. Gallagher: No, they don't happen overnight. I remember Senator Wayne Morse. You know, he kept introducing legislation that kept getting turned down and turned down, and it took ten years to get a piece of legislation accepted that was really important. I think that is the lesson. We seem to live in a country where the concept of life is built around athletic contests. You know, who won the game? So the legislative business is a continuing business, and you never really win and you never really lose. You ask when does the river end and the answer is it never does—it just keeps flowing on. An example of this is that legislation, although it is passed, is not a battle won because something is authorized. You still have to have appropriations for money to be available to be spent. Until those appropriations are made you really haven't got anything but a piece of paper in your hands.

Ms. Neuman: That's being very frank.

Dr. Gallagher: Well, it's true. One of the exciting and most powerful things in the area of the gifted in terms of getting something done was the emergence of parent groups. Ten years ago the only parent group I knew about was in Southern California, and parents would not dream of coming together in an action group. They thought that would be kind of bragging to their neighbors. It has only been in the last four or five years that they've said "No, by goodness, if something is going to get done in this area, we're going to have to get organized and get something done." And they've done it. And so we see these parents' groups and citizens' groups springing up all around the country. They have tremendous influence on legislators who will listen very carefully to what they have to say.

Ms. Neuman: May I ask you—why the need for special legislation for gifted and talented?

Dr. Gallagher: I think what we are faced with is a financial crisis in the field of education. There just is not enough money to do the quality job that we feel should be done. Given that situation, you're going to ask, "Where is the money going to go?" What money we do have is going to go to meet immediate crises because, you remember, we act on crisis. The gifted are a long term erosion problem—it is an erosion of talent that affects our society over a long period of time—but you can't say that the whole world is going to fall apart Monday if you

don't have a special program for the gifted. But other people can make that kind of claim for some of the other pressing areas of society. So the reason we need special resources at the state or federal level is to provide catalytic funds. They allow school systems to do some adventuresome things that they otherwise wouldn't do and couldn't spend the money on because the money is already committed to some other areas.

Ms. Neuman: In terms of getting people together, we all know that it just doesn't happen overnight as has been said. How do you communicate with people who have the same interests? How do you go about this? Is there a mechanism that you use? Are there special techniques?

Dr. Gallagher: Well, I guess you just have to find the people. The opportunity exists in conferences, and also in other kinds of general meetings where you have a chance to speak out on the issue. Some people come up and identify themselves and they say, "I'm very interested in this, I want to know how to do this." Then there are professional organizations like TAG (The Association for the Gifted) that professionals can belong to. And there are other organizations that are supportive of programs for the gifted. You also have mechanisms like the National/State Leadership Training Institute on the Gifted and Talented (LTI), directed by Irv Sato and David Jackson. I have been a consultant to the LTI and that has been a mechanism to help communicate ideas in this area. I've been very impressed by the way in which they have gone about it and the effectiveness that they have had.

Ms. Neuman: Does it have any other goals apart from a communication goal?

Dr. Gallagher: Yes, the focus of communications is to encourage state action. What the LTI has done was to bring in teams of five people from a state—the state of North Dakota, Arizona, New York, etc.—and they went through very intensive three-week training periods in the summer which brought participants up to date on the newest ideas and developments in the education of the gifted. Also, it gave them a kind of primer as to how to impact on the local educational system, the state educational system, and on the decision makers, like legislators.

Ms. Neuman: So in effect they became the facilitators who would return to their own states.

Dr. Gallagher: Yes, that's right. They asked that the team have a special kind of composition. They wanted someone high up in the hierarchy of the state education agency so that that person could

go back and influence things within the state system. They wanted a local education person and a parent or a citizen type who could really speak out freely and effectively without being worried about what the rest of their educational responsibilities are, and a legislator interested in the problem. Now when these people go back as a team, they try to impact on all of the various systems that they are members of and they support one another. When things don't always go the way they should, they have four other people that they can communicate with and can say, What do we do about this now?

Ms. Neuman: Was the team concept based on some particular theory?

Dr. Gallagher: Well, I'd have to ask Sato and Jackson, I think, about that. I think you can see the traces of Havelock and some of the other people who have written on social change. I know that Brickell's earlier report on organizing New York state change was something that impressed Jackson very early, even back in Illinois days. So I would think that there are some

Ms. Neuman: seeds of those thoughts.

Dr. Gallagher: There certainly are.

Ms. Neuman: May we return for just a moment to interest in gifted and talented, and may I ask you about how the interest in gifted and talented gained momentum—did you organize specific activities or did it just happen again?

Dr. Gallagher: You mean in this recent period?

Ms. Neuman: Recently, in the reawakening of interest.

Dr. Gallagher: The reawakening. That's an interesting question because I'm not sure what the answer is. All I know is that things are happening. I think there is a combination of things of interest at the federal level, and the visibility of attempts to get legislation passed stirs up interest. I think there is a growing concern and interest in the general public that wasn't there before. If you had to trace it back, I'd say that is a general recognition of the limitations of our resources in this country. This is a very new concept for Americans to face. You know, it used to be that they would say it didn't matter if we wasted things, that we had so much. We would just use it up and throw it away and get something else. We have now gotten across the concept of conserving our natural resources. We

say there is not enough energy to go around; there is not enough food to go around; we have to start paying attention to this problem and conserving. It's a very short step from that point to saying there is not enough brains to go around either. We have a tremendous number of problems for this society to solve.

Ms. Neuman: That's a very interesting viewpoint. I know, to add a little personal note, that when I came to this country two years ago, I asked a naive question when I saw all the lights left on in the government offices in Washington: Did we have to pay for electricity? So I take your point.

Dr. Gallagher: We have a long way to go before we start really conserving either our energy or our brains. I think what recent interest has done has been to provide a kind of underlay of public interest and support, and a recognition that "Yes, we had to get something done." Another model that I think has been destructive to us has been a competitive dog-eat-dog style of operating, in the sense of saying that you are ahead of me and that is bad and I will work to see that I get ahead of you. So if you are supporting programs for gifted children, and you talk about this to public groups, you will always get somebody who will react by saying, "My kid's only getting C's in school and here you have a proposal by which my neighbor's kids, who are already doing better than my kids, will do even better." They say, "Why should I support something like that which would push my kid even farther down the ladder?" That's the honest person who thinks that. There are a lot of other people thinking that who aren't saying it. But I think there is also a change in that attitude to the extent of some people being willing to say we have to live in a cooperative world, not a competitive world.

Ms. Neuman: I think that is true.

Dr. Gallagher: If that is true then we need all the help we can get from anybody, from any source. That then means "yes," let's get the special programs, let's get the special talent, let's do what is necessary so that these people can get in there and do an effective job of solving these problems.

Ms. Neuman: I think it is probably true that we are now in a position of requesting special attention in many areas—the gifted is just one of them.

Dr. Gallagher: Sure.

Ms. Neuman: We were talking about legislation and I know there will be many people interested in how you find legislators to become interested in

gifted and talented education, or for that matter in any aspect of education. What do you do?

Dr. Gallagher: I think in this area, like in other areas, if you speak your message out loud enough and long enough they will identify themselves and will come forward and say they would like to help you in this area. Or you would go as citizens or educators to various legislators, and ask them if they are interested. It is a simple matter. People think somehow or another they have to have something very important or special on their minds to go in and talk to their legislator. In lots of ways he is a servant of the people, and he is more than willing to listen to you. If he won't listen to you he will have members of his staff who are more than willing to listen to you. So you talk to these people and you ask them if they are interested and some will say, "Oh yes, that's an interesting thing," and they don't follow it up. Others will say, "Tell us more about it. Can we go see some programs that are special in this area so that we can get an idea of what this is all about?" You can invite the Congressman or the Senator to various kinds of meetings to give a speech—a convention of some sort. If they come and if they are enthusiastic, then you know you have someone who is interested. The use of professional conferences and meetings to bring forward Congressmen who are interested and who have a highly audible say on the topic has been one technique that has worked very well.

Ms. Neuman: Now that we have legislation on the books, are you happy with the results of the work of the past couple years? Is this the end or are we still in the middle of the river?

Dr. Gallagher: No, we are still in the river. We will always be in the river. I was in Washington long enough to know that some legislation gets passed and never gets any money. So it just ends up as pieces of paper. But, I think the kinds of things that have happened have been very encouraging. So is the kind of support that we are getting from all kinds and levels of society. One of the breakthroughs we had was that for a while programs for the gifted were looked on as elitist. It has only been recently that the concept of minority groups having gifted children too has taken hold, and that programs really need to include representatives from all ways and walks of life, because you can find giftedness and talent in every ethnic and every racial group that we have in this society. We have really spent some serious time in the last five years trying to find more effective ways to have giftedness among minorities emerge, because it does not appear as clearly sometimes as in more favored and upper middle class backgrounds.

Ms. Neuman: May we change our focus a little to that of the teacher? At this point in the interview I was wondering if you could imagine yourself in a situation where you have to teach someone else how to become a facilitator. Could you tell us what you would tell somebody if they were going to make some of the changes that in fact you initiated? First of all, when you begin planning social change, what are the things you look for in order to organize your approach?

Dr. Gallagher: Well, let me respond to the first part first. I am not sure you can teach somebody to do this in the traditional sense. I think you can encourage those characteristics they already have. I think a very wholesome respect for the opinions and feelings of other people is crucial. Training in clinical psychology trains you to try and listen for the feelings of people, and I think if you violate the rights or the privileges of people and ride roughshod over them, then you are in very difficult situations. I don't care how many techniques you know as a change agent. Beyond that, I think a certain amount of patience and persistence has to be either trained into you or you have to recognize that that is what it is going to take. Everybody who tries to get decisions from public bodies finds that there are a lot of other people who have great ideas too. They are trying to get their thing passed and approved, and there is not enough money and not enough resources to go around. So, if people don't automatically see that your program is the most wonderful thing in the world, you have to be patient. You have to keep working, talking to them, understanding what their objections are, and trying to get across to them the values of the program you have. That takes time. You can't do it in one speech. You can't do it in one interview. I think you have to recognize the slowness of this whole thing, the necessity of keeping at it. You are going to get discouraged because it is not going to work, and you are not going to get the things you want the first time, the second time, or the third time. I guess that is the message I would try to get across to people who are interested in doing this kind of thing.

Also, find your allies. Who wants to help you? Who sees in the kind of thing that you are doing something that will help something that they are doing? Maybe someone who is interested in mathematics curriculum development sees the programs for the gifted as an area that they want to support because it is in line with their own interest. Someone who has great interest in developing the arts and humanities may say, "Yes, that's down my alley; I would like to see something in that area."

You get people who are public spirited, people who look far into the future and say, "We have to use the talents and brains of our society if we are going to survive the next couple of decades; we have to do something with this just for the benefit of our country."

You get so cynical about these kinds of things and about all the deals that have been made in politics that you tend to forget that there are a lot of people who really do think that positively. They really do prize the country, and they want to see good things happen to it and are willing to listen to people who they think have something that will help. You always have to talk to politicians about "what's in it for me." And of course a politician is interested in survival. If he is in danger of being beaten at the next election you are going to have a hard time talking to him about anything else. But there are other people who are free from that, at least for a period of time, who want to look at the future, and who want to do something good for their country. They want to do something good for their state or city and you can appeal to them on that basis. You don't have to just appeal to them by saying if you're for this you'll get 20 votes.

Ms. Neuman: To use a word that you used before—it is really a matter of perseverance, a little bit of wisdom in making use of people who really are friendly toward your goals.

Dr. Gallagher: Yes, and the other thing is that you should know the institution you are trying to influence. If you are trying to do something about a university program that you think ought to be improved, you have to know how universities work. More knowledge helps more. If you want to get a law passed, you need to know. A lot of people think that you need 300 Congressmen running down the middle of Pennsylvania Avenue screaming in support of this legislation. But you and I know that three or four will do if they are on the right committee and have the right seniority and if there is no group in opposition. You need some very good people who will work hard at this. If there is no vocal opposition, then it is likely that it will pass. Somewhere down the line it will pass because these people, being at the right place at the right time on the right committees with the right power to get things done, are all you need. You do not have to run a public opinion poll that says I have 63% of the public behind me, or I must have 52% of the Congress in my pocket before I can even dream of starting. That's not so. That is the secret that is known to people who work around state capitols and around Washington. But it is a secret that everybody ought to know about.

Ms. Neuman: That you can get places with a few people.

Dr. Gallagher: Yes.

Ms. Neuman: May we get back to the question that we were talking about before? When you begin trying to effect some sort of social change, what are the kinds of things that one has to look for? I think we have covered some of them in talking just now. If you were to select a couple of them, what would you highlight?

Dr. Gallagher: I guess the basic question is: What basic need are you trying to solve through this social plan? Can we identify what it is, then can we find the people who have this need (either obviously or by implication), and then can we reach them through institutions or organizations or some sort so that they know that you are there? Can we work with enough of these people to develop some kind of strategy or plan as to what needs to be done? Then can we mobilize the organizations to get it done? Having the education organizations behind the program is an extremely important thing because they have many strong influences on public decision makers.

Ms. Neuman: You were talking about the word *techniques*—I think you used the word *strategy* rather than technique. What would you consider to be the two or three most important strategies—if you used strategies?

Dr. Gallagher: It may differ for different areas. For the gifted and the talented, what I have learned from the Illinois experience and the Washington experience is that you start carefully and small. You build your support gradually through experience. The more people that you get involved and committed to these programs, the more the support fans out, becoming more substantial and broader in its base. Only then should you go for a large systematic program of some sort because then you will have lots of people in chorus behind you saying "Yes, that's right." One of the things we did in Illinois—Bill Rogge pretty much did in Illinois—was to bring in key members in the state who were heading demonstration centers and programs for the gifted. These were all people coming out of all different kinds of places—educational, administrators, teachers—people who had been picked out by their school system and told that they were now heading the program for the gifted, or a demonstration center, or a reimbursement program, or what have you. These people were brought in for about eight weeks of solid eight hour a day training in the summer. In the middle of that time they either became disgusted or a

great-majority of them became conquerors. They said this was wonderful, and they went back and sold the program in the local community. By the time it came around to support the general program we had a broad base of support from all the leadership people who were out there fighting our battles for us.

The same kind of thing is happening with the Leadership Training Institute. With teams now from about 48 states who have already been through it, they can see the virtues of the programs and are ready to battle for them. By the time something really does come up of a major nature, you have all sorts of allies in all sorts of positions out there who are willing to go to bat for you and say this is a good idea, a good program, let's go. But it takes that slow development until you find your allies. You build a leadership group that is interested in this area and then and only then are you really ready for a larger operation. I think in some ways the crisis approach operation—the Chicken Little approach to policy—can get money, but then there are neither the trained personnel nor the basic support for the program in the community. As a result, a lot of these programs flounder. They get bad reputations and they get into a lot of trouble. I think the way in which the program for the gifted is being developed—very slowly, very gradually, building upon leadership—is a more permanent way of assuring that you don't have those peaks and valleys where one moment you're on top of the world and six months later you're at the bottom of everything. We have had enough of those wild swings up and down and I think we need to have a more gradual program development philosophy.

Ms. Neuman: We are building something which will be more lasting.

Dr. Gallagher: Yes, that is the whole notion.

Ms. Neuman: We are building a Manhattan on a rock.

Dr. Gallagher: Manhattan project. Yes, I think that's right. Gross swings of interest that are artificially induced by fear have the seeds of their own destruction in them. Because people are hostile they keep their hostility in check during the positive phase but they wait for something bad to happen. Something bad *will* happen because you haven't prepared the groundwork for it. Then they leap on it and use it to tear down and destroy the program. Building a positive attitude in large sections of society for this kind of program, slowly and gradually, is a much more fruitful way to go.

Ms. Neuman: And determines success to a certain extent.

Dr. Gallagher: Sure.

Ms. Neuman: In thinking about social change, are there any particular assumptions you would make about people in the education field, particularly in reference to the gifted and talented?

Dr. Gallagher: I'm not sure . . .

Ms. Neuman: . . . or about the education system in general? In terms of changing social systems, are there particular assumptions you would make about education systems?

Dr. Gallagher: Yes, I think the assumption that everybody has a right to make is that the education system, like all large systems, has a kind of inertia to it that doesn't change easily, and that one has to find the mechanisms by which one can impact on these systems because they don't want to change. As a matter of fact, you don't want to change; I don't want to change either. In ways I am not ready to change. You ask, how do you get people ready to change and willing to change? That's really the point. How do you show people the place in your program that meets their need so that you can get change to take place? I think that time is one thing that you are going to have to spend a lot of in this kind of business. It requires time and constant and persistent contacts with large numbers of people before you can count on getting the job done.

Now the problem with this system is that it's built up from 18,000 individual school districts, and so there really is not in place anything which is a cross-school system kind of operation. Training programs are in universities that were developed almost apart from the schools. There is always the complaint that they are not responsive to the schools. Your research comes from a completely different source. What we would want for a state, I would think, would be a balanced program where you say I am not satisfied just with special teacher allotments or setting up special classes. I want to see in the state program the back-up that make it a quality program. There has to be training; there has to be curriculum development; there has to be research and some means of circulating new ideas, either in terms of technical assistance or consultation of some sort. These all ought to be part of the state plan.

When the money gets appropriated by public bodies, what usually gets appropriated is earmarked for services but not for the support systems. So the task of the facilitator, or someone who has this concept in mind, is to get to the people to explain the importance of these support programs for the children. You just cannot grind out teachers like a sausage grinder and throw them out in

the field and forget about them if you want a quality program. You have to have continual inservice training, you have to have ways of getting new ideas into their hands. None of these are frills, which is what they are sometimes called. Supporting services cost about 10% to 15% of what you spend on straight service to the youngsters. But that 10 or 15% will make the difference between a really first rate quality program and a program that is just limping along.

Ms. Neuman: On the note of quality I think we have taken up enough of your time. I think we have all realized that change is an ongoing process, particularly in this area. As a final comment in terms of the gifted and talented thrust, do you think we are going to see it as a more lasting or . . .

Dr. Gallagher: I think so. You mention change. I'm delighted to have you come because I love to talk as everybody knows. Let me try on something that impressed me once. Someone once said change is all around us. That's true, but look at what

happens every time we try to change things deliberately. Sure, the automobile changed our social lives, and television changed our family life, but nobody planned it that way. It wasn't a group of people who got together and said now we're going to change the life of the families by introducing television. As a matter of fact, every time we have deliberately set out to do something it hasn't worked very well.

What this means is that we have a lot more to learn. My guess that the gifted program will continue a pleasant growth—continuing growth—is just a guess because I don't know what the forces are that will really affect us. I do think that the needs of the country for talent are so great, and I think the realization of that is so great, that it is hard for me to see how the country will back off from the very modest effort that is going on now. I can only see that we will get more.

Ms. Neuman: Again, my thanks to you. It has been a delightful afternoon.

Current Publications on the Education of the Gifted and Talented

Available from The Council for Exceptional Children, ERIC Clearinghouse on Handicapped and Gifted Children

Topical Bibliographies

All bibliographies listed here should be ordered from the CEC Information Center, The Council for Exceptional Children, Reston, Virginia 22091, using the stock number provided. Bibliographies are available at a cost of \$3.00 each for CEC members, \$4.00 each for nonmembers.

Stock No.	Title	Date
667	Creativity	1975
639	Gifted and Talented Research	1973
661	Gifted Children and the Arts and Humanities	1975
636	Gifted - General Readings	1973
660	Gifted - Handicapped, Disadvantaged, and Underachievers	1975
668	Identification of the Gifted	1975
656	Mathematics and Science for Gifted Children	1975
609	Programing for the Gifted	1975

Other Publications on Gifted and Talented Education

Stock No.	Title and Description
8	<i>Productive Thinking of Gifted Children in Classroom Interaction</i> , 1967. Interrelationships among sex, family environment, self concept, cognitive style, verbal expressiveness, IQ score, and scores on productive

thinking test among gifted secondary school students. \$2.40. 112 pages.

The Abilities of Young Children, 1967. A study to establish criteria for evaluating the creativity of products of elementary school children and to determine the relationship between creative ability and intelligence. \$3.00. 76 pages.

Personal and Social Adjustment of Gifted Adolescents, 1962. An investigation of the similarities and differences in the personal and social adjustment of intellectually gifted and average adolescents. \$3.00. 72 pages.

Gifted and Talented Children: Practical Programing Aids for Teachers and Principals, 1972. Explores ways to enhance school programs for the bright student, through planning by administrators, teachers, and parents. \$2.75. 88 pages.

They Shall Create: Gifted Minority Children, 1974. Paul Torrance reads and comments on poetry and prose written by Black and Mexican American youth. Ernest Bernal explores how the Mexican American community perceives giftedness and identifies its gifted children. Irving Sato presents an overview of the dimensions of talent and giftedness. Tape cassette. \$10.00 per cassette. 60 minutes.

Arts and Humanities: Perspectives on Gifted and Talented Education, 1974. Directories, articles on arts and humanities education for the gifted and talented, funding sources, community resources, bibliography. \$3.00 for CEC members, \$4.00 for nonmembers. 77 pages.

116 *Resource Manual of Information on Gifted Education*, 1975. Directories, bibliography, film resources. Articles on the federal role, state of the art, teaching the gifted, identification of giftedness among Mexican American children, the role of the Leadership Training Institute. 96 pages.

117 *Training Teachers of the Gifted and Talented: A Comparison of Models*, 1975. Discusses teacher characteristics, the role of the teacher as change agent, compares various preservice and inservice training models. Bibliography and listing of colleges and universities which offer degree programs in gifted education. 64 pages.

118 *Gifted and Talented: Developing Elementary and Secondary School Programs*, 1975. Articles on values education for the gifted, disadvantaged gifted, instructional planning, starting a gifted program, and a featured interview with Dr. James Gallagher. Bibliography. 52 pages.

Available from the National/State Leadership Training Institute on the Gifted and Talented

Developing a Written Plan for the Education of Gifted and Talented Students, by Irving S. Sato, Martin Birnbaum, and Jane Early LoCicero. A matrix for the national summer institute on the education of the gifted and talented. Intended as a

framework to facilitate the writing of plans to meet individual needs upon which a comprehensive course of action can be built. \$3.00.

The Gifted and Talented: A Handbook for Parents, by Jeanne L. Delp and Ruth A. Martinson. This handbook answers questions commonly asked by parents of gifted and talented children and provides useful information on the problems and needs of these children, as well as constructive ways to meet those needs. \$3.45.

The Identification of the Gifted and Talented, by Ruth A. Martinson. This instructional syllabus presents a rationale for the identification of gifted students, suggests appropriate identification procedures, and gives samples of materials used by various school districts. \$6.05.

Providing Programs for the Gifted and Talented: A Handbook, by Sandra Kaplan. This handbook has been written for those initiating or expanding programs for the gifted and talented. It presents an overview of features which need attention in designing and implementing a program. \$6.45.

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Gifted and Talented Education: A Topical Bibliography

THE entries in this bibliography have been organized into several subsections according to subject area. While the bibliography is by no means exhaustive, we have tried to make it broadly representative of several fields of interest within the education of the gifted and talented.

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